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CONFERENCE OF LIBRARIANS AT WASHINGTON.

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Held at Washington and Baltimore, February, 1881.

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Owing to the neglect of many who were present to sign the roll, their names are not included in the following list. The editor has supplied the omissions, so far as was possible, from other sources. When a library is mentioned in connection with any one's name, he is the librarian, unless otherwise designated.

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THE LIBRARY JOURNAL.

CONFERENCE OF LIBRARIANS, WASHINGTON, FEBRUARY, 1881.

THE PRESIDENT'S ADDRESS.

BY JUSTIN WINSOR, LIBRARIAN OF HARVARD UNIVERSITY.

LADIES AND GENTLEMEN:—We are to be congratulated on coming together in Washington; and we come here opportunely. We are glad to draw nearer at last to the National Bureau of Education, remembering how it signalized the centennial year for us by the publication of that encyclopædic report about the institutions we represent.

We are glad to find ourselves face to face with that ardent friend of bibliography, the librarian of the Surgeon-General's office, who has shown, not only us, but the experts of the older world, how the highest results of that science can be reached by a rare intelligence and a comprehensive energy.

We are proud to be, as it were, the guests of the Librarian of Congress. We come in full recognition of a merit that well befits his official dominance among us. We hope the cheer he gives us only foreruns the pleasure which is due to him, when he shall see the treasures of a national library spread in all their amplitude through a spacious depository, worthy of a great nation and worthy of him.

Before our sessions are over we shall have opportunity to inspect the plans which have been proposed for this great national library. Whatever the disposition to make it every way worthy of our needs and worthy of our resources, there must still be, in the construc-

tion of it, errors to be escaped as well as merits to be embodied. The problem, it must be confessed, is not an easy one. It will not solve itself, like some political ones. This is to be confronted successfully only by a thorough understanding of the possibilities of the future. The mechanical devices for annihilating time and space present, in these days, the question of library construction in a changed light.

The new significance of libraries as the necessity of the many, as well as the essential home, as it may be, of the few, widens the field of observation, and makes the institution both a monument and an engine. The library has grown to have eminently a practical bearing upon our general education and upon our training as citizens. I think of it sometimes as a derrick, lifting the inert masses and swinging them round to the sure foundations upon which the national character shall rise. You who have had daily dealings with the work of libraries know this to be something more than a piece of rhetoric. We may discuss the many recurring mooted points in our economy,—the fiction question, or any other,—assuming that we tread upon a vantage ground; we may peer through vistas of our own making, and think we see the universe; we may be uncircumspect; we may go on floundering, without

lead or compass, and while we are doing it the library has grown ; men and women have come up to it, and taken something better than homilies. The beneficence of the world of books has been spread about, and the wheat has choked the tares.

I would not be blinded to the fact that mischief, and enough of it, may lurk in books. It will do its work in spite of us ; but, if we would keep it at its minimum, we do not wisely make this mischief prominent. Our emphasis should be upon the wholesome, and upon

that which healthfully stimulates. I would put more trust in one such educational catalogue — as the term is — like that, for instance, of the Brooklyn Library, — an admirable boon to all of us, — than in scores of narrow visionaries, who do not know that it is the moles in their own eyes which become the blotches on the playful page. I must decidedly differ from those who, for the common good, take to the method of magnifying an evil the better to eradicate it. I believe that under cultivation the weeds succumb.

CLASSIFICATION ON THE SHELVES.

BY C. A. CUTTER, LIBRARIAN OF THE BOSTON ATHENÆUM.

THE Secretary of the French Asiatic Society, the late Jules Mohl, for twenty-seven years prepared annually a report detailing and estimating what had been done throughout the world during the year in the study of Oriental subjects. It would not be a bad plan for us to have reporters, who should at these meetings give an account of what has been accomplished in the various departments of our profession. At any rate what I have to present to you now is not so much a paper as a report on three efforts in the section of shelf-classification, made by myself, Mr. Arnold, and Mr. Warren.

The two problems that we all have to deal with are: (1) to make an arrangement that will suit the needs of our particular kind of readers, whatever it may be; and (2) to express the classification in such a sign language that we shall be able to preserve it, and keep all the books of a class together while receiving the additions by which our libraries are growing from beginnings of a few thousand volumes to storehouses of it may be a million. In a paper read at the Boston Conference¹ I explained the new notation for arranging authors alphabetically in each sub-section (so as to allow unlimited intercalation of new books without

disturbing the arrangement), the new class notation in which both numbers and letters are employed (so that the largest possible number of classes may be marked with the fewest characters), and some of the main features of the classification. This we have begun to apply at the Athenæum; the plan for Literature has been finished, and History and Geography nearly so. Some details have been improved, and some difficulties overcome. The more I work over the scheme the harder it seems to me to make a satisfactory classification, and the more I am convinced that even an imperfect classification is better than none, and that a notation which admits of indefinite extension is better than one which compels the arrangement of the books to be torn to pieces every fifteen or twenty years and built up all over again, — a wasteful and disheartening practice. The idea of publishing the classification in form similar to Mr. Dui's Amherst system has been given up for the present, as I prefer to subject my ideas to the test of actual use before fixing them by type. Copies of the parts which are complete have been made for the use of several other libraries.

Having myself discarded the "fixed location" — that is location by shelves — and adopted the "movable" — that is location by subjects — I was pleased to see that Harvard University

¹ Library Journal, 4: 234-243.

Library had found the advantages of the latter so great as to adopt it in regard to one class of books, the publications of the British Record Commission, and of the Master of the Rolls, and of societies like the Camden Society, Early English Text Society, etc. "The advantages," Mr. Arnold says in his report, "are that an indefinite number of new volumes can be inserted at any point, and that if the collection should outgrow its present position it can be removed without any change of the numbering." Now, as these advantages do not apply one whit more to these few publications than to all the other classes of the books, it is difficult to see why the movable location should not be used throughout the whole library, unless there is some great counterbalancing advantage in the fixed. I have used the latter for twenty years in three different libraries, and I see no such superior merit in it; and I am glad to see that our national library, which no doubt is destined to remain the greatest in the country, and which we all hope is going to be in its new building the exemplar of all that is best in library architecture and library management, — I am glad to see that this library is not hampered by any traditions of the antiquated unexpansive system, but is arranged solely by subjects; and I hope that for its own sake it will adopt some method of noting the exact places of the books in their several classes, which a very short stay there this week showed me would greatly facilitate the work of all connected with the library.

The Boston Public Library, I was told the other day by one of its officers, is experiencing considerable embarrassment from its fixed location. Some of the classes are crammed full; in others there is room. But books cannot be drafted from the overcrowded districts into the less populous, because that would confuse the classification. A little relief has been obtained by carrying off certain sets not much used into upper rooms, etc., and some others, chiefly bibliographical, into the working-rooms of the library. But this expedient has its drawbacks. In a printed catalog the shelf-marks cannot be changed. The boy sent for one of these books comes where it ought to be, and it is not there. In its place he finds a dummy, a

thin block of wood bearing the shelf-mark of the missing volumes, and a direction to their present habitation. So the unfortunate "runner" (as those boys are called), who has already, perhaps, come some distance to get his book, has to go another journey in search of it, while the reader waits patiently. In a large building each journey may be long; and here, no doubt, is the origin of some of those half-hours of waiting, into which the public magnify their four or five minutes of actual delay. Then, again, I am told a dummy is more easily misplaced than a book, and the absence of a dummy, tho not an insuperable obstacle, is a serious one.

I wish now to call your attention to a new classification, whose author, I was sorry to find, could not be here himself to explain it. At Harvard University Library, Mr. G. F. Arnold, who has charge of the book arrangement, has introduced a method, not, indeed, new in its theory, but which, so far as I know, has never been carried out in just the same way in its details. If the plan is not new, the execution is original. The theory is the one followed at many college libraries, of dividing the books according to the professorial departments, rather than according to any formal, preconceived system of human knowledge. So far as access to the shelves is allowed at all in a college library, it is allowed to the professors and to students working under them. It is, therefore, entirely in accordance with the fitness of things that the books, for example, which the professor of the classics and his pupils will want to use together more than any other professor or his pupils, should be put in the classical alcove. Part of these books, according to the systems, would go somewhere else. No matter; in this library they are not wanted so much somewhere else as they are here; we will put them here. So with the professor of history, of political economy, of law, of art, of mathematics. Now, it goes without saying that this plan will not do in a library where there are no professors, nor anything corresponding to them; where the general public is to be suited, with its multifarious, continually intercrossing demands. For a special library, special arrangements, and, therefore, for a college library,

which is, properly, a collection of special libraries; but, for a general library, a general system.

You may ask, indeed, why a general library, in which (as a rule) the public have no access to the shelves, should have any arrangement whatever. If all books are to be asked for on call-slips made out from the catalog, and are to be brought by runners, who know nothing of books but their numbers, why waste the brain and time of the librarian in devising, and the brain and time of him and all his assistants in applying, a system of classing books which, for all practical purposes, must be a dead letter? I answer that, in the first place, there are a number of general libraries, like my own, where the patrons themselves go to the shelves and hunt up their own books. In such libraries, the importance of a good, and, especially, of any *easily explained*, system is incalculable. No catalog, however well made, can compare, for educational power, with the sight of the books themselves; or, for convenience, with a thuro and minute shelf-arrangement. In the second place, there is no library so exclusive that it does not permit some favored persons to go to the shelves. In the third place, the librarian needs it daily, — many times a day, — to assist him in recommending books to his readers. Mr. Green has shown us, in several papers, at successive conventions, what a librarian can do to double the consultation, and quadruple its value, by judiciously pointing out to people the best books of reference, and showing them how to use such aids. Would Mr. Green's work have been possible if his reference-library had been entirely unarranged, as his circulating department is? Perhaps he can carry his library in his head, — as do many custodians of a reasonable number of books, — and so has no absolute need of classification. Very well; but suppose Mr. Green should be offered the librarianship of the great public library of Tokio, and, fired with the idea of introducing among the Japanese his theories of the proper relation of the librarian to his public, should desert Worcester for a new field, how soon would his successor get a working knowledge of a collection of 20,000 unarranged books? Subject arrangement is worth making merely for the

assistance it gives the librarian in the scientific working of his library.

But I have been somewhat diverted from Mr. Arnold. I was going to speak of his sub-arrangement. By Mr. Dui's Amherst scheme in each subdivision the books are put upon the shelves as they happen to come into the library, the first numbered 1 and the second 2, and so on. In mine, the final order under each subdivision is alphabetical, and a carefully devised notation was prepared to allow of new books being added, like cards to a card-catalog, without disturbing this order. But Mr. Arnold's prevailing arrangement is chronological, and rightly. *I* want a library fitted for ready reference. *He* wants a library fitted for deliberate and careful study. English literature, for instance, I have divided into Poetry, Drama, Fiction, Miscellanies, Collected Works, and a dozen other less important classes; and under each I follow out the alphabetical plan, so that one can put his hand in an instant on Tennyson's *poems*, or Sheridan's *plays*, or George Eliot's *novels*, or Macaulay's *essays*, or Hobbes' *works*; and this is done because that plan will bring most convenience to my readers. But Mr. Arnold's readers are different. They want to study the whole Elizabethan age, or the writers of Q. Anne's time, and so he groups together all the literature of the Elizabethan age, poets, drama, miscellanies; and then the Q. Anne period, literature of all kinds; and then the Georgian era; and then the reign of Victoria. So Science, when he comes to it, he will undoubtedly throw into groups, and separate the early chemistry from the chemistry of Lavoisier and his contemporaries, and their works from what is now styled the "new Chemistry." Not that Mr. Arnold despises the alphabet! By no means! When there is no reason for any other arrangement he adopts that. The history of Massachusetts towns he will undoubtedly arrange alphabetically by the names of towns. Nor do I despise chronology. On the contrary, in the History of England I have a separate class-mark for every reign. And even in Literature I intend to divide the *belles lettres* of each country into two parts: one, the modern, going back as far as one can read with ease and comfort, say in English to Shak-

spere; and the other, that earlier literature, which a man not specially practised reads with difficulty and a glossary. In French I should divide just after Montaigne; in German at about the same date. So much division is all that the general reader needs; and so much occasions him no discomfort. The users of early English are a distinct and small class. It is an aid and no trouble to them to have the early authors put by themselves. Ordinary readers are little affected one way or the other by the segregation, and both know in most cases whether any author they are in search of is before or after Shakspeare. Only a few books on the borders give us pause. On the other hand, for the impatient man of business to have to cudgel his memory to determine whether the author he wants to refer to in a hurry is an Elizabethan, or a Georgian, or a Victorian, is felt by him to be an intolerable check; and, what is of equal importance, it is very hard to explain to him just how, why, and where you draw the lines. For him the more simplicity the better. The problem is to estimate the forces at work in different directions, — some pulling towards minute classification, some towards larger division, some towards the alphabetical point of the compass, some towards the chronological, — so as to determine accurately where in any given library is the point of equilibrium.

There is an example of this in a question which I had to decide the other day, where to put Fairy stories, Legends, Imaginary voyages. I had provided a place for them in my classification; but the books themselves were with the Fiction; had been so in the Athenæum from time immemorial. Should they stay mixed in with the novels in one alphabet, for the sake of ready reference, or should they each form a small collection by themselves? If you mix them you have merely to know the name of the author or collector of a volume of Fairy stories or Legends, and you find the book at once in the alphabet of novels: Grimm, for instance, between Gerald Griffin and Mme. Guizot; and Andersen's Fairy tales between Ames and Arblay. You do not have to stop and think whether the book you want is a collection of Legends or a collection of Fairy

Stories, as you do if the three classes are separated. On the other hand, if you have forgotten the collector's name it will take you a long time to pick out the comparatively few Fairy Stories among the hosts of novels, and find the one you want; and so it will if you are desirous of seeing at once all the legendary collections which the library possesses. Of course if there is a good classed catalog the difficulty is very much diminished; but the *shelf classification* by itself is evidently in this case insufficient. I do not undertake to say what would be generally best; but for our library I decided that the ready reference obtained by having the Fairy stories all by themselves was greater than the convenience of never having to think whether a given book was a novel or a fairy story, because in a majority of cases the readers would know well enough in which category to look, and in the few doubtful cases the worst that could happen would be to have to look in two places. Moreover, the shock to the classificatory sense of having an indiscriminate mixture of such widely different kinds of "fiction" is worthy of some consideration.

In comparing these two methods I am not saying that one arrangement or the other is the best abstractly. You cannot say that any arrangement is *the best*. Everything depends on the end which you wish to reach. In fact, I have to repeat in regard to shelf arrangement what was said in my essay on cataloging in regard to classed catalog *vs.* dictionary catalog: the one is better for the thorough and leisurely scholar, the other for the hurried man of business. In Harvard College Library Mr. Arnold's elaborate arrangement very properly accompanies Mr. Abbot's thorough and minute catalog. When both are finished I have no doubt both will be found admirably suited to the atmosphere of the place, and to the needs of the students. In my own library, where I must provide not so much for the wants of those who are pursuing a connected course of study as for the desultory reader, more simple arrangements, which demand less previous knowledge on his part, must be sought for.

One other work has been done this year which falls under the scope of my report. I

must introduce it by referring to one of the papers read at the Manchester meeting of the English Library Association. This paper urged a somewhat novel method of arrangement.

Starting with the ordinary objections to an elaborate filosofical scheme, which looks very well on paper, but does not fit your books, the writer advocates not having any scheme at all at first, but putting each book as it comes in wherever it seems at the time to go best, and so letting an order grow up; an order which would be the one of all others best fitted for the particular library in which it originated, — an exact fit, like the covering of a shell-fish, he might say, or skin of a man; whereas the ordinary premeditated system would be like a suit of ready-made clothing. Or he might claim for his way the superiority of the English constitution, developed through the ages as the exigencies of each generation required, over the French constitutions, carefully and fully drawn up, with an immense show of completeness in one generation, only to be found unsatisfactory and pushed aside by the next. But it seems to me that there is a *via media*, which is a better way than either. Do not make your scheme out of your own inner consciousness merely; that is impractical. Do not decide any individual case on its own merits as it comes up, with no general ideas to go upon; for the result of that will be inconsistency, contradiction, confusion. That is equally impractical. Make your plan beforehand, but make it from books. A scheme suggested by and made so as to contain all the books now in the world would not require much stretching to embrace those that shall hereafter be written. Of course no one can actually get at all these books themselves; but catalogs will supply their place. If you wish to prepare a frame for art literature, examine carefully the largest art library you can find, and make a skeleton arrangement that will suit that; then consult all the art catalogs you can lay your hands on, and see if you have omitted anything in the first sketch; then consider the subject itself, the relations of its parts, and the possibilities of future discussion. The scheme you will form in this way will be far superior to the hap-haz-

ard order which our English friend suggests. It is true that the covering of the mollusk and the skeleton of the vertebrate grows with its growth, and is altered by its environment and the accidents of its life; but for all that it grows in accordance with a prearranged plan. Now this use of large special libraries to found a classification on is exactly what has been done in the third work to which I desire to call your notice.

The Bureau of Education has a library of over 20,000 volumes and pamphlets on educational subjects. This collection has been classed by Mr. S. R. Warren, whom we all know as the editor and part author of the famous report of the Bureau on Libraries; and he has drawn up a systematic list of the divisions, which I understand is to be presented to us to-day, and afterwards printed by government. I shall say nothing about it, for in truth I have not had time to examine it; but I wish to point out the peculiar value to the general classifier of these full special schemes. It is true, in adapting them to a general library we have to make some changes, because for the purposes of such a collection various books are brought in, which for general use belong in other departments. But this is a trifle compared with the advantage of getting a conspectus of the subject at once comprehensive and minute.

And now I have only to urge upon any library that is about to rearrange, or is thinking of going into a new building, not to tie down the volumes to a particular shelf of a particular alcove, bringing books into an incongruous relation with the accidents of architecture; but to designate their location in terms taken from their own nature, to mark them, that is, as belonging to a particular branch of this or that subject. The first method must be at best temporary; the second is permanent.

Of course anything that is human is liable to error, and even in this movable location there may be need occasionally of change, to correct mistakes in placing individual works, and sometimes to improve a detail of the classification, or to provide for some new development of science. But in its main outlines, and in the

far greater part of its details, the movable location never needs any change; while the fixed location inevitably requires, sooner or later, unfixing and refixing.

Buildings become too small, become antiquated, decay, are abandoned; but geography

does not become history; the natural sciences are not metamorphosed into the social sciences; mathematics will never be theology; fiction remains fiction, the drama the drama, poetry poetry, as long as literature and libraries last.

THE CONSTRUCTION OF LIBRARY BUILDINGS.

BY W. F. POOLE, LIBRARIAN OF THE CHICAGO PUBLIC LIBRARY.

THE subject of library architecture came up for consideration at the last meeting of this Association in Boston by having our attention directed to the construction of larger buildings than we have had experience with, of which several will be built in this country during the next five years. There was no time for a thorough discussion, and it was, by common consent, agreed that the more deliberate consideration of the subject should be resumed at the Washington meeting.

In the course of my remarks on that occasion, in which I made some suggestions as to the construction of this class of buildings, I said: "I know of no better rule to be observed in the library architecture of the future than this: 'Avoid everything that pertains to the plan and construction of the conventional American library building.'" My present purpose is to explain and illustrate what I then could treat only in outline, and do some construction on my own account. I am convinced that the conventional style of library architecture is very faulty, and that we shall never have a general reform until better principles are applied to the construction of the largest buildings. The smaller libraries are constantly copying and perpetuating the confessed faults and worst features of the large libraries.

By the "conventional American library building" I mean the style of which the Boston Public Library, Boston Athenæum, Astor Library, Cincinnati Public Library, Baltimore Peabody Institute, Congress Library, and others which I might mention, are the representative types. All these buildings have lofty rooms, and a large, open space surrounded with

alcoves and galleries which are used for the storage of books. Although these buildings have a variety of detail in other respects, this is the conventional style of which I speak. I might illustrate what I have to say by exhibiting the interior view of any one of them. I have selected, however, for this purpose, the latest, the best, and the most carefully planned of all these buildings,—that of the Peabody Institute, of Baltimore. Here some of the objectionable features of the older buildings have been avoided, and useful appliances and devices have been introduced. It is, however, with the general plan we are now concerned.

The main library hall, of which I show you a ground plan and an interior view, is 84 feet long, 70 feet wide, and 61 feet high. On the front is the reading-room, 72 × 36 feet, and in the rear a work-room, 38½ × 20 feet, and the librarian's room, 15 × 20 feet. The alcoves are six stories high; they project 18 feet from the walls, and there is a passage-way two feet wide next to the wall, for access between the alcoves, which are 12 feet apart. A skylight in the roof and two small windows in each alcove furnish ample light. The present shelving capacity of the room is 150,000 volumes. It is certainly a stately and imposing structure; and if we will banish from the mind all consideration of convenience, utility, and economy, and regard its architecture simply as an æsthetic recreation, we may pronounce the picture before us beautiful. It is the nave and aisles of a Gothic church of the Middle Ages, with the classic associations of five centuries about it, brought down to the practical uses of a modern library structure.

There are some objections to this venerable and conventional arrangement, and I will mention :—

1. The wastefulness of space in this central portion of the building. Books are shelved only in the aisles; the nave is empty, and serves no other purpose than contributing to the architectural effect. Is not this an expensive luxury? Here is a solid block of vacuity, 84 feet long, 34 feet wide, and 61 feet high,—more than half the capacity of the room,—which can be applied to no possible use in the storage of books. The floor can be used, and is used, in most of the libraries of this class, as a reading-room, and as a general promenade for tramps and sight-seers. It is unfit, however, as we shall presently see, for a reading-room; and the trustees of the Peabody Institute have had the good sense to provide another and suitable room for this purpose. The storage of books, therefore, is the only practical use to which this room is applied, and half its capacity is wasted in order to secure architectural effect.

2. The second objection I will mention is the difficulty and expense of heating such a room as this. In our northern climate fires are kept for six or seven months of the year, and, for four of these months, large fires. Hot air from a register or radiator rises to the ceiling like a balloon, and the upper strata become intensely heated before the lower stratum, in which we live, has a comfortable temperature. This arrangement is a wasteful expenditure of heat. In the Cincinnati Public Library the unequal distribution of heat is partially obviated by warming the marble floor, by means of steam-pipes beneath the floor, and drawing off the heated air of the upper galleries by ventilation, or cooling it in the lantern of the roof, which in winter serves as a refrigerator. This is done, however, at an enormous expense for fuel. The librarian informs me that 500 tons of coal are consumed in the library furnaces in an average season. He has sent to me tests of the temperature in different parts of the library which he made on December 29, when the thermometer outside indicated 3° below zero, and also on the evening of January 4, when 120 gas-lights were burning, which indicate that the temperature on both occasions

was fairly equalized. Four years ago a friend of mine visited this library, and, observing the intense heat in the upper galleries, procured a thermometer and ascertained the temperature near the floor and in the upper gallery. Six feet from the floor it was 65°; and in the upper gallery, 124°. Mr. Dyer, librarian of the Mercantile Library of St. Louis, writes to me, under date of Feb. 3, 1881, that the temperature of his library hall on that day, one foot above the floor, was 64°; 10 feet above, 74°; 19 feet above, 82°,—indicating that the increase of heat was about one degree for every foot of elevation. He adds that, during the summer, the mercury, two feet below the ceiling, frequently reaches 140°.

3. I object, in the third place, to the shelving of books in galleries *under any circumstances*, and especially in this instance, where the alcoves are piled one upon another, six stories high. I may group my objections under three heads :—

(a.) Because galleries are a wasteful expenditure of the physical strength of attendants in climbing stairs, and of the time of readers in waiting for their books.

(b.) Because the bindings of books in galleries perish from heat, and the higher the books are above the floor the more active is this destructive agency. Leather is an animal tissue, and will not, like linen, cotton, paper, and other vegetable substances, sustain, without injury, a higher temperature than we find agreeable to ourselves. Books cannot live where men cannot live. They are more nearly allied to us as cogeners than we are wont to suppose. In excessive heat the leather of bindings slowly consumes, and its life departs. If we put our friends in torment, they prove to us the doctrine of annihilation. Bindings perish from other causes, one of which is the presence of sulphuric acid in the leather. This acid is used in a process of the manufacture called “clearing,” and, from haste or negligence, is not thoroughly extracted before the leather is finished. The sulphurous residuum of gas combustion is also said to be injurious to bindings. The burning of gas, I have no doubt, is very injurious to bindings in libraries of this construction, and chiefly because it raises the temperature in the galleries.

In libraries bindings have no such aggressive and destructive an enemy as excessive heat. All the large libraries in this country and in Europe are lamenting its ravages, and often without a suspicion of the real cause of the deterioration. A well-known architect of Boston recently called upon me, and, conversing upon this subject, which was new to him, said that he frequently went into the galleries of the Boston Athenæum to consult books, and when he came down found his clothes covered with a fine red powder. He asked if I knew what that powder was. I replied that I had often observed the same fact in the same locality, and I had no doubt that it was the *ashes* of the bindings which had been consumed by excessive heat.

Books should, therefore, be shelved in the coolest part of the room, where the air is never likely to be overheated, — which is near the floor, where we ourselves live and move. In the private libraries of our residences a mistake is often made in carrying the shelving of our bookcases so high that they enter the upper and overheated stratum of air. If any one be skeptical on this point, let him test, by means of a step-ladder, the condition of the air near the ceiling of his common sitting-room, on a winter evening when the gas is burning freely. The heat is simply insufferable.

(c.) Besides the reasons already given, I object to the shelving of books in galleries, because it is unnecessary. The 150,000 volumes, the present capacity of the Peabody Institute hall, can all be shelved near the floor, where convenience in reaching them and their preservation require them to be. In order to exhibit this fact to the eye I ask your attention to this scale-drawing of the floor, with the bookcases so inserted. The folios and quartos will be shelved in wall cases extending around the room, and the royal octavos and smaller volumes in double cases, open on both sides, three feet apart, the side alleys being three and a half feet wide, and the central alleys four feet wide. Instead of having two alleys four feet wide, the better arrangement for this room would be to have a central alley five feet wide, which would give direct communication with the reading-room from the work-room and

librarian's room. The cases will not be so high but that a person of average stature can reach any book without step or ladder.

The rule for estimating the shelving capacity of any room of considerable size, arranged in this manner, is to allow 25 volumes for each square foot of flooring. In this instance the capacity is 27 volumes per square foot, because the cases are longer than they are usually made. The shelving capacity of these cases is 160,050 volumes.

As I am to use further on, in some construction of my own, the estimate that each square foot of flooring will shelve 25 volumes, I will here explain how it is obtained. The double cases are 18 inches wide, and of any desired length, say 16 feet. The space which one case will require is a rectangle, of which the longer side is the length of the case plus the width of the alley (usually four feet), or 20 feet. The shorter side is the width of the case (18 inches), plus the distance between the cases (three feet), or 4½ feet. One case, therefore, requires 90 square feet of flooring. The area of shelving on one side of the case is $16 \times 7\frac{1}{2}$, or 120 square feet; on both sides, 240. The conservative rule which is usually adopted for estimating shelving capacity for books of all sizes which go to make up a general library is ten volumes for each square foot of front area. The capacity of the case requiring 90 square feet of flooring is, therefore, 2,400 volumes; and one square foot will shelve 26.6 volumes. Twenty-five volumes, therefore, to the square foot is a reasonable estimate.

By reducing the width of the alleys from 4 to 3 feet, and the distance between the cases from 3 to 2½ feet (in the stack-room of Harvard College library the distance is 2 feet 4 inches), the shelving capacity could be considerably increased. I have preferred to allow liberal spaces between the cases, and not to force the principle of contraction to its utmost limit. The estimate of 25 volumes to each square foot applied to large rooms brings out such enormous results as to be almost incredible.

We have now, in theory at least, shelved all the books which these six tiers of alcoves will contain upon the floor, and have space for 10,000 volumes more. We have, also, over-

head, 61 feet of air and light, which is more than we need. Sixteen feet is better than 60, for it is enough. Three other floors, each of the same capacity, the rooms being 15 feet high in the clear, would fill the 61 feet and about 6 feet more. In the three upper stories the space which on the lower floor is appropriated to the work-room and the librarian's room could be used for bookcases, and would shelve 76,800 volumes. The entire storage capacity of the building would therefore be 717,000 volumes. This arrangement, when the library comes to need so much shelving space, would allow of a classification of its books into four grand divisions or departments of knowledge, each one of which would have a floor and reading-room to itself. The reader, then, by means of a modern elevator, would go directly to the floor on which the books in his own range of study are stored.

4. Returning to my general series of objections to the conventional style of library architecture, I mention, in the fourth place, the difficulty of getting about from one part of the library to another. Not to speak further of the burden of climbing stairs, it is necessary, in order to move from one gallery to another on the opposite side, to travel on the outer edge of a parallelogram, when the economies of locomotion require that we move as nearly as we can in straight lines, and from the centre outwards. Observe the ease with which any case of books can be reached on this floor plan, and the difficulty in the conventional plan of passing from a lower alcove to one in a remote corner of the upper gallery. In a popular circulating library it is positively cruel to send attendants for books with such an arrangement for shelving as this; and to station them in the overheated and stifling air of galleries to answer calls for books is even more inhuman.

5. I object, in the fifth place, to this plan of construction, on account of its insecurity from fire. In an interior finished with wood, no arrangement could be more skilfully devised for favoring the destructive operations of fire than a series of alcoves piled one upon the other six stories high, with every facility for draft — unless it be a pile of empty packing-cases. When a building of this kind takes fire

the work of the insurance adjuster is very simple, for it is a total loss of the whole library. Water, heat, and smoke are as fatal to books as fire itself. Congress Library has twice been burned; Harvard College library once; so also the Chicago Historical Society's library, in what was thought to be a fire-proof building; and the Birmingham Free Library, which several of us visited little more than three years ago, has since, with its great Shaksperian and Cervantes collections, been burned with fire, and nothing of its more valuable treasures saved. The class of library buildings which we are now considering will contain books, manuscripts, and public records of inestimable value which money cannot replace. To lose one of these libraries by fire would be a national calamity. After all that may be done in the way of external protection, there is still a large risk from internal accidents.

On a summer evening, a few years ago, a fire broke out in one of the rooms of the Cincinnati Public Library after the building had been closed for the night. It was fortunately discovered and extinguished before much damage was done. The origin of the fire was at first a mystery; but it soon appeared that the painters, who had been finishing the wood-work of the room, had left their oiled rags on the ledge of one of the bookcases when they quit work at night, and they had ignited by spontaneous combustion, and had set the bookcases on fire. The Birmingham Library was set on fire in the daytime by the lamp of a careless plumber who was thawing out the gas-pipes. A fire may start in a large library at any time by accidents as unusual as these; and it were a shame if, from errors of construction, it be allowed to range through the whole building. Hence, buildings such as we are considering should be constructed in a series of fire-proof compartments, in order that the fire may be confined within narrow limits. I am not aware that this precaution ever has been taken. The principle, however, has been applied to the great ocean steamers, and many a ship has been saved by having its hull divided into several water-tight compartments. A practical method of securing this protection will be considered later in our investigation.

6. In all the libraries of this class in our country, except the Peabody Institute, the open space in the nave of our old Gothic church is used as a general reading-room; and in the Peabody Institute, where another reading-room has been provided, tables have been placed in front of each alcove, cutting off public access to them, at which students may study, if they choose.

There are several objections to the use of this open space for that purpose. It is too public and bustling a place for quiet study. Here the business of the library is done. Readers are applying to the custodians for books, and attendants are running about on the marble floor delivering their orders and taking new instructions. The emptiness overhead is appalling. Crowds of visitors and sight-seers are marching by, admiring the architecture, expressing their views on what they see, and asking each other, in audible tones, if they suppose the librarians have read all these books and know what they contain. One engaged in study hears remarks which were not intended for his ears, and sees sights which distract his attention. I said at our meeting in Boston: "It is like attempting to study in Scollay square, or on a mall of Boston Common." Those of you who have visited the reading-room of the British Museum will remember the strict precautions which are observed to secure perfect quietude in that sacred precinct. Applications for books are made in writing; and if it be necessary for readers to speak to the attendants, the conversation is in a tone so subdued that no reader can hear it. No person can enter the room unless it be for study, and he must show his ticket. The American librarians who, three years ago, were the guests of Mr. Garnett, the superintendent, were taken to an elevated position overlooking the floor, and the details of the arrangements were explained in whispers.

7. The seventh objection I will mention to this style of architecture is the difficulty of enlarging it. How is this building to be enlarged when the growth of the library demands an extension? Shall it be extended heavenward, and more galleries be piled on these, with more wasted space in the nave, greater difficulty of access to the books, and

more extravagance in the heating? Shall transepts and a chancel be built, so that the plan will represent the true ecclesiastical cross? However pious these improvements, and gratifying to the taste of the refined architect, they are expensive, they involve demolishing much that has already been constructed, and they will give but little additional room. Why library architecture should have been yoked to ecclesiastical architecture, and the two have been made to walk down the ages *pari passu*, is not obvious, unless it be that librarians in the past needed this stimulus to their religious emotions. The present state of piety in the profession renders the union no longer necessary, and it is time that a bill was filed for a divorce. The same secular common-sense and the same adaptation of means to ends, which have built the modern grain-elevator and reaper are needed for the reform of library construction.

Any plan for library construction is faulty which does not foresee and provide for future enlargement. The Boston Public Library, with a building like this, has for ten years been struggling with the problem of enlargement, and has at last solved it by resolving to abandon the building and the site with all the ingenious devices and expensive improvements made upon the premises during the past quarter of a century. The last winter the City Council of Boston petitioned the Legislature of Massachusetts for the gift of a block of land in the Back-Bay District for the Public Library, and the petition was granted. Much trouble and expense had been saved if the hopeless and temporary schemes of enlargement, such as dividing the alcoves by double bookcases, had been abandoned years ago. There is probably no library building in the country which has been so much admired (by non-residents) as that of the Boston Library, and none whose worst features have been so generally copied by the smaller libraries. The Astor Library makes its enlargement by erecting another and similar building on an adjacent lot. Its third building is now in process of erection.

The trustees of the Peabody Institute have provided for the increase of its shelving capacity in the same manner as was done in Boston, by dividing its alcoves with double cases. In

anticipation of this change two small windows for each alcove were originally made in the side-walls, which will light both sides of the double cases when they are built. It is obvious that this arrangement will be a blemish to the architectural effect of the interior. These many windows serve in winter, by their leakage and radiation, to reduce the excessive temperature of the upper galleries; but it is done at an enormous waste of heat.

8. My eighth objection to this sort of library construction is its great cost, compared with a simpler, less pretentious, and more convenient style. The enclosure of so large and high a room as this requires that the outer walls, the girders, and the roof, be of unusual weight and cost. The lantern or skylight in the roof, which ought to be wholly of iron and glass, is expensive. The structure, whose plan is before you, cost \$342,000, which includes the cost of two lecture-rooms beneath, and two art-rooms above. The Boston Public Library building cost \$325,000. The Cincinnati Public Library, with a capacity of 250,000 volumes, cost \$350,000. The two structures of the Astor Library, and the third not yet completed, all with a capacity of 300,000 volumes, will cost \$398,000. It is a practical question, allowing the plans of these buildings to be the best that can be devised, whether these are not too large sums to be expended for such limited accommodations. Is it not lavishing upon the casket what ought to be spent on the jewels?

I will not detain you longer in discussing this part of my subject. I think I have said enough to justify the statement with which I started out, that "I know of no better rule to be observed in the library architecture of the future than this: 'Avoid everything that pertains to the plan and construction of the conventional American library building.'"

Up to this point I have freely passed judgment upon the plans and buildings of others. I am now to do some construction of my own. "It is easy," says the old proverb, "to criticise; it is not easy to construct." I have no pride of opinion that can be wounded by any strictures which may be made upon my plans. I offer them to be criticised. My only purpose is to secure better principles in our library

architecture, and this can best be done by a free interchange of opinions held by practical librarians. I therefore cordially invite any librarian, architect, or other person present, whose building or plans I have criticised, to take his full measure of revenge upon my work when I have concluded.

In the plans I now lay before you, I propose, on a lot of ground 200 feet square, the construction of a building for a reference library of 1,000,000 volumes; and in order that the library may grow, I expect, upon the same lot, without cramping the space for storage, or changing anything that has been constructed, to provide for 2,000,000, and later for 3,000,000, volumes. By doubling the size of the lot to 400 X 200 feet, 6,000,000 volumes can be provided for. It is proposed to erect no more of this building than is needed to meet present wants, and that additional compartments of similar construction shall be built from time to time as they are required. In devising this plan I have sought to secure the following results:—

1. That the building shall be constructed in compartments, and as nearly fire-proof as is possible, so that if fire starts, it shall be confined in the compartment in which it originates, and the rest of the library be saved.

2. That waste room shall be reduced to a minimum; that convenience and utility shall never yield to architectural effect; and that the building shall be easily and economically heated.

3. That more spacious and convenient quarters than we now have shall be provided for the administrative department and the working rooms of the library.

4. That there shall be no climbing of stairs for books, and no overheating of bindings in galleries.

5. That greater facility of communication between different parts of the library shall be secured; and that the books shall be shelved near the floor, and no higher than they can be reached without step or ladder.

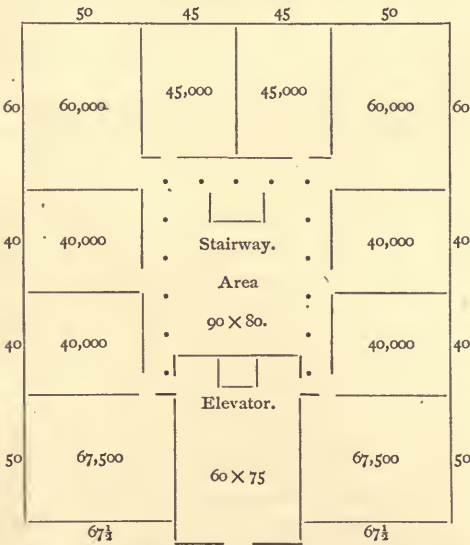
6. That quiet accommodations shall be provided for readers; that separate rooms be assigned to special subjects, and furnished with such special arrangements as they need for their storage and use.

7. That the cost of construction shall be

kept within reasonable limits; and that convenience, utility, and economy shall be the controlling principles in the design.

I do not claim that my plan is the only one that will meet these requirements, but simply that it is one such plan; and, if it serves no other purpose, it may suggest a better design. It has at least the novelty, if not the merit, of being a radical departure from the beaten track.

My first requirement is a lot of ground 200 feet square, surrounded on all sides by streets, or, what is better, by other open space. On the middle of the side most appropriate for the



NOTE.—A rough sketch (made with printer's rules) may give a general idea of the plan of a single floor. The figures on the outside indicate the dimensions in feet, and on the inside, the storage capacity, in volumes, of each room. The dots within the quadrangle indicate the pillars which support the corridors. The drawings and sketches used by the author in reading his paper at Washington will be given in the edition printed by the United States Bureau of Education.

main entrance I place the central building, 60 feet front, and 75 feet deep, which will be wholly devoted to the administrative superintendence and work of the library. Here will be the offices of the librarian and heads of departments, the catalogues, the most general works of reference, and here the business of the library will be done. Here will be apartments for the cataloguers, and for unpacking

and arranging books. The bindery will occupy the upper story.

The books will be stored, not as now in one general repository, but in a series of rooms thrown out as wings from the central building, and extending around the lot. These rooms will be 50 feet wide, 15 feet high, and as long as it is convenient to make them. The width of the wings will be determined by the space that can be well lighted by side windows, and that can be spanned by iron girders without pillars. Ten of these rooms are indicated on the plan before you, and, carrying the same construction four stories high, there will be 40 of these rooms in the whole structure. Each of the rooms will contain the books on some special subject, or in the early stage of growth, several related subjects. One room will be devoted to the Fine Arts, and will have the proper cases, tables, and other appliances for shelving and studying the large and expensive illustrated works which belong to such a collection. Another room will have the Mechanic Arts, with such other arrangements as is required. Another room will contain History, and, when the library has grown to a million volumes or more, perhaps American History only. Political Economy and Social Science will be found in another room, and so on through the different classifications of knowledge. These rooms will have no alcoves nor galleries; for alcoves I regard as useless, and galleries an unpardonable nuisance. The books will be shelved in wall-cases and double cases not higher than a person can reach. The plan of shelving the books is the same which I have already described in speaking of the floor plan for the Peabody Institute. High light will be taken on the exterior side from windows above the wall-cases. Each room will have light from two sides, and will be furnished with tables, chairs, and all the conveniences for quiet study. The reading-desks will be on the inner side where there are no wall-cases, and hence the windows looking into the quadrangle will be of full length. The attendant in charge will have an opportunity to become acquainted with the books in his department, and competent to assist readers in their investigations.

There is, therefore, no occasion or need of a general reading-room, other than the one in which are kept the encyclopædias, dictionaries, and the general works of reference. Special dictionaries may be shelved with their own departments, and to some extent general works of reference may be duplicated. When it is necessary, books can be loaned from one department to another, as they are now sent to the reading-room. The building will be supplied with telephones and all the modern appliances for communication. As a general rule, readers will go to the room which contains the class of books which they wish to study.

As a protection from fire, each room used for the storage of books is cut off from every other room by a brick fire-wall extending through the roof. The only access to these rooms will be by a light iron corridor at each story, seven feet wide, running around on the inside of the quadrangle, as indicated on the plan. In winter these corridors may be enclosed by glass windows, which can be removed in the summer. The long windows in the quadrangle will give abundant light, notwithstanding the small amount which will be intercepted by the corridors. Every floor will also be made thoroughly fire-proof. They will be laid on rolled-iron beams, supported by lattice girders, the space between the beams being filled with porous terra-cotta; and the beams will be covered with concrete, upon which the flooring will be laid. The girders will also be protected by an ornamental covering of terra-cotta, which will serve as a decoration for the ceiling of the room below. Without such covering, iron, in case of fire, is the most treacherous of all building material. If by accident fire should start in any one of these forty rooms, it could not endanger the safety of the other thirty-nine.

This arrangement of access to the rooms by means of corridors serves another purpose besides being a protection from fire. It is a protection against tramps and sight-seers, who would be marching in crowds through these wings if there were a passage-way through them, as in the Louvre at Paris. Such a passage-way would take up a good deal of room, would interfere with the arrangements for shelving the books, and would disturb the quietude

which is needed for study. It is a delusion to depend on iron doors between the rooms as a protection from fire; for, in such an emergency, iron doors are always found to have been left open.

In the rear of the central building will be an elevator, which will land readers upon the level of any of the corridors. As the central building will not be used for the storage of books, it will have stair-ways, besides the elevator, for reaching its several stories. In case of accident to the elevator, the stair-ways can be used for access to the upper corridors. On the rear side of the quadrangle there will a stair-way connecting the several corridors. If time allowed I might speak of other details of construction.

We will now consider the storage capacity of this building, and first of a single floor. Deducting the space covered by the walls, there are 25,250 square feet of flooring in these wings. Deducting still further one-fifth of this space (or 5,050 feet) for the tables and other accommodations of readers, we have 20,200 feet which can be used for bookcases. By the rule we have already demonstrated, that each square foot will shelve 25 volumes, we have for the shelving capacity of this story 505,000 volumes, and of the four stories 2,020,000 volumes. The ceiling of the upper story is only 66 feet above the lower floor, and, if more space be needed, the walls may be carried two stories higher, which will give accommodations for another million volumes. The walls will then not be higher than many of the blocks in our commercial cities, which, by means of elevators, are used as business offices to their upper stories.

By extending the front wings 100 feet on each side, and carrying them back to the rear line, leaving an area 50 feet wide for light and ventilation, we have accommodations for 3,000,000 volumes more, or 6,000,000 on a lot of 400 × 200 feet. By extending this construction over a lot 400 × 450 feet, as in the plan before you, we have a capacity of 12,000,000 volumes.

It is desirable for many reasons that a large reference library should be surrounded by wide open space, and should be away from business

centres. Such lots are not always available in a large city, and it is necessary to erect the building on a business block. A construction such as I have described is favorable for such a locality. A large number of volumes can be provided for on a lot of moderate size, and as a source of revenue the basement story could be used for business purposes. The building with its fire-proof construction would not be endangered in case one of the basement apartments should take fire. Whether it could live in such a furnace as the great Chicago fire is a question.

I have thus far considered only the wants of a reference library like the British Museum, the Astor Library, and the Peabody Institute. It may be necessary to provide also for a circulating department. One of these front rooms, which will shelve 67,500 volumes, may be used for this purpose. The circulating department may be located in the basement whose storage capacity has not been included in our previous estimates. There is a clear open space in the quadrangle, nearly 90 feet square, for which no provision has yet been made. A one-story structure, lighted from above and covering this space, will not interfere with the light of the reference department. It will contain 120,000 books for circulation, with ample space for waiting- and delivery-rooms. Access to it might be had on the basement floor under the main entrance to the reference department.

One very important part of the subject remains to be considered, viz., the cost of the building. In this matter I have not ventured to trust my own judgment, and have relied wholly on the careful and detailed estimates of one of the most experienced and conservative architects in Chicago, Mr. Wm. H. Willcox,

who has built many large structures, and is now building the State-house at Lincoln, Neb., which will cost \$1,250,000. I have his estimates with me; and, as they are too long for me to read, I will only state the results.

The estimates are made on a building such as has been described, covering a lot 200 feet square, five stories high, including the basement, and having a capacity of shelving 2,000,000 volumes. The exterior will be of sandstone, in simple yet characteristic design. The building is to be absolutely fire-proof, with brick walls and iron beams, iron window frames and sashes, and steel inside blinds to all exterior windows. The interior iron-work will be covered with porous terracotta, or other fire-resisting material. The floors in the book-rooms will be of hard-wood, and in the vestibule and inside corridors of tiling. The walls of the same will be wainscoted in stone and tile. The cost of the building complete, including the steam apparatus for heating, but not including the shelving and furniture, will be \$530,000. The shelving, which will be of hard-wood, with the furniture, will cost \$110,000, making the entire cost of the building in readiness for occupation \$640,000. The cost of construction, on the basis of storage capacity, in the Boston Public Library, is \$1.30 per volume; in the Astor Library, \$1.33; in the Cincinnati Public Library, \$1.40; and in the Peabody Institute, \$2.00. In the plan I have laid before you, the cost of construction, estimated on the same basis, is 32 cents per volume.

I will take no more of your time in presenting this subject, and shall now be happy to reply to any inquiries which may be made.

THE NATIONAL-LIBRARY BUILDING. — THE PROPOSED PLAN.

BY MR. J. L. SMITHMEYER, THE ARCHITECT.

OF all the tasks an architect may undertake, that of building a library is the most difficult. This is chiefly because its interior cannot, like that of churches, theatres, and other large edifices, display vast surfaces, huge columns, or other lofty and imposing features, giving it the

character of grandeur and permanency; but must utilize its space by a multitude of fixtures of small dimension for the accommodation of numberless objects of still smaller size, and yet must possess a certain elasticity, as you might call the capability of expansion for

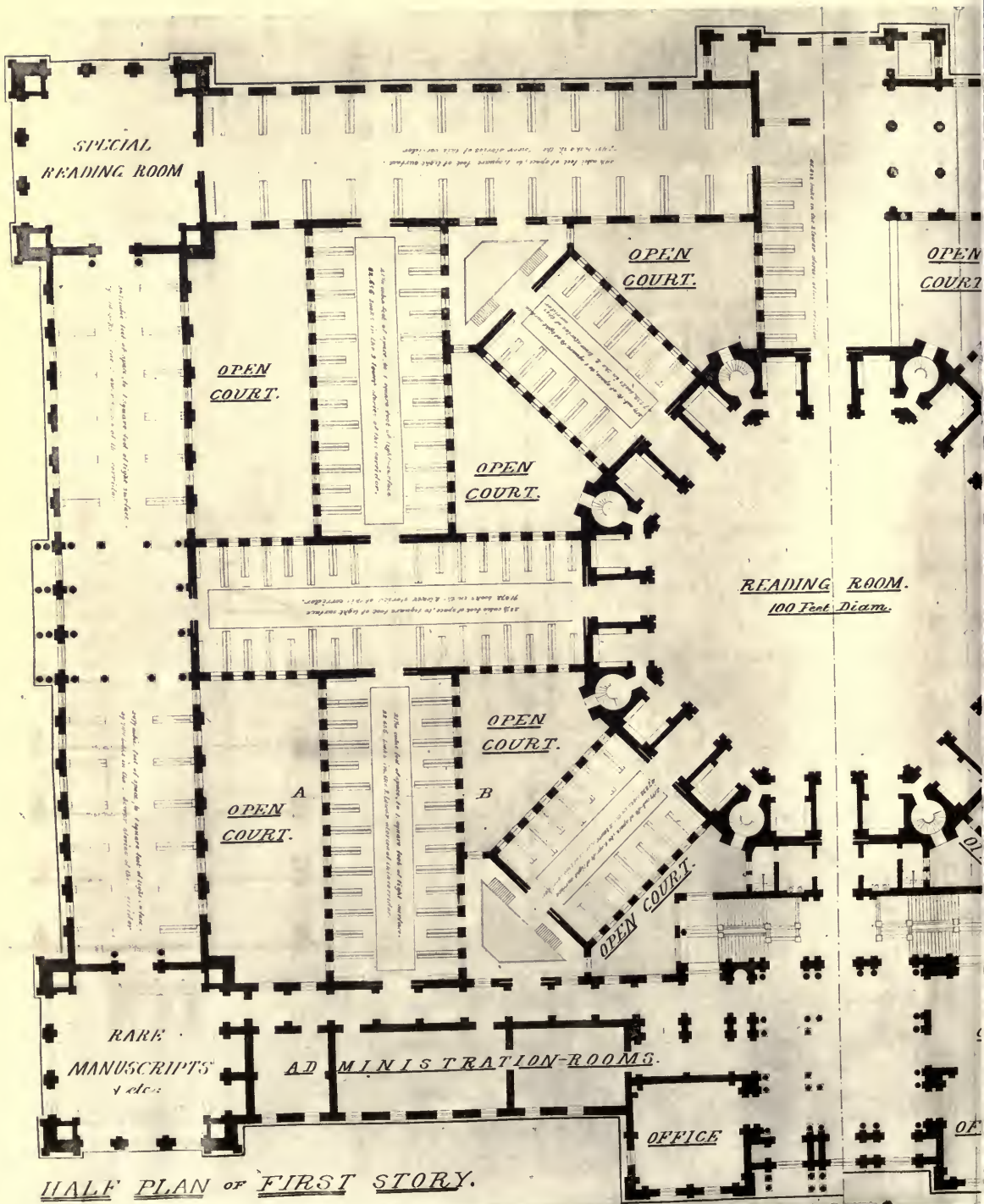
a certain, rapid, and large increase of the present contents. Such arrangements, one might think, rather belong in the province of handicraft than art, if it was not that all parts thereof must be in perfect harmony with the architect's plans of the whole structure, who alone is the absolute sovereign and distributor of the element most indispensable for such an institution, viz., light.

In the construction of a library, however, much attention is paid to the best fixtures and conveniences, or the most useful contrivances for books, pamphlets, maps, lithographs, engravings, and whatever else the manifold treasures may be called, which the human intellect has compiled therein or will collect, and to their accessibility, classification, distribution, etc.; their consideration is of secondary and by far inferior importance to that of a full profusion and equal distribution of light. This element is so indispensable for the purposes of a library that nearly every other consideration—that of protection against destruction or injury by fire perhaps excepted—may be postponed till after the question of its introduction is fully disposed of; and any architect who would allow other subjects to absorb his mind and study to its detriment or neglect may be sure of failure and loss of reputation, whether the edifice to be erected by him be of the greatest and unprecedented dimensions and compass, or merely of inferior prospects, and whether the library which is to be built be a public or private one.

To accept any interior arrangement—whether tested by trial and approved by experience, or still on probation—as an infallible model for imitation under *all* circumstances would be a very grave error; because there are no two libraries of exactly equal requirements, and each one is erected and fitted up under peculiar and mostly heterogeneous influences, such as cost, site, capacity, building material, etc., etc. But to imitate single features of interior arrangements, which have been found acceptable and may be adaptable under a contemplated programme, is not only unobjectionable, but absolutely necessary, because it is impossible to devise for every library a new and distinctly different system of arrangements; but even

such examples should be modified according to the necessities of the prevailing circumstances, yet never without due reference and deference to the controlling element of all libraries, viz., light, day, or sunlight, which can neither be reproduced nor substituted by scientific means. It is further not to be forgotten that a system of fixtures, however commendable for a private library, may be anything but advantageous for a circulating or college library; nor that one for a specific purpose, for instance, a law library, will answer for a parliamentary or congressional library, and it is certain, beyond argument, that no existing system, *as it is*, will come up to the demands of our contemplated National Library, with its numerous ramifications and enormous annual growth.

It would be useless to discuss the libraries most prominent in the world in all their merits or defects, as no such institution, either in the Old or New World, in the past or present, required such extensive premises and manifold arrangements as the National Library of the United States, which, in fact, is to be more of a *museum of literature, science and art, than strictly taken as a collection of books*. It, with its millions of sources of information, will become ere long not only the rendezvous of the learned men of the East and West, but actually the Mecca of the young giant republic, which to visit, at least once in his life, will be the wish of every American, and vast numbers from other nations will join them in the journey to see the last marvel of the world. In consequence of this, provision will have to be made for the hosts of visitors and curiosity-seekers, as well as for the ease and comfort of readers or students; and besides the ample halls and apartments needed for inquiry and search of congressmen, scientists, and literary men, and the premises of great importance, such as packing, binding, distributing, and other rooms, there will have to be ample passages for the throng of spectators. These passages must, with the exception of the circular reading-room, be located in the middle of the apartments, directly under the skylight, not to cast the intensest light upon the visitors, but to prevent the latter from detracting any of the rays of light from the cases and their contents. That, in



this way, the greatest flood of light possible is obtained by connecting the vertical rays of the skylight with the lateral beams from the windows, without permitting the interposition of any opaque object, needs no argument, and has the further advantage that the architect secures, by these passages *in the middle*, the greatest possible elasticity of fixtures or the power of expansion for the book shelves and cases.

Experience has established the so-called "alcove" system as the most popular and practical of arrangements for bookcases and shelves, by projecting them a suitable distance (at right angles with the walls) into the room between the windows, in as many tiers or stories as practicable, so as to secure the best light obtainable. The "stack" or file system, by which the shelves or cases are placed in parallel rows (with narrow passages between them and around them, *i.e.*, between them and the windows) is another device for storing books, which has its advantages and disadvantages;—among the former of which is "greater economy of space;" among the latter, the danger of leakage from the skylight. The most natural inference, therefore, is that an architect harmonizing both systems, by partially adopting each one, will probably reach the best solution of the problem to provide for the necessities of a steadily increasing capacity for the multiplying contents of a rapidly growing library.

Using the present "alcove" system for present demands, he can at any time hereafter, when necessary, economize space by adding rows of stacks of cases between the two now forming the alcoves,—placed parallel with the alcoves,—and thereby increase their capacity fully by one-third. Moreover, by closing the well-holes in the centre of the lower apartments, he can again economize space by introducing the stacking system, and thus gain a very great additional capacity for storing books. And, by finally separating the copyright exhibits from the library building, if need be, the large apartments designed for their use could be fixed up for the accommodation of shelves in stacks, and thus the capacity of the library be still further increased from 2,500,000 to nearly 10,000,000 of books, and all this without any

material inconvenience or extension of the building under consideration. There have been made objections to wide passages in a library, on the ground that a library is not a *show-place*, but a retired place for quiet and calm inquiry and study; but such an objection is not tenable as to a National Library, which is essentially of a public character, and in which the mere observation of its arrangement and management is in itself an object of interest and study like a museum, and there are enough separate provisions made for the pleasure and curiosity of the mere spectator, so as not to interfere with the ease and other claims of the reader or student. To refuse to our public an insight in the colossal array of knowledge which the human mind has accumulated and still gathers together, and into the enormous machinery required for the access to and the utilization of every part of these intellectual riches, would not only be antagonistic to our free institutions, but directly in discord with the spirit of our age.

The central feature of the whole organism is the great octagonal reading-room, 100 feet in diameter. The inner sides of the octagon are divided into three spaces in the lower story, each containing two alcoves and one door, or archway, in the centre, which leads to the wings containing the books. These alcoves are arranged for the reception of catalogues, books of general reference, and such as are most frequently called for. The archways are equal in height to two tiers of alcoves, thus giving 32 in number. The mezzanine story above will contain another series of 24 alcoves, making a total of 56, with a capacity of 260,000 books. By this arrangement the architect is afforded the desired opportunity to buttress the central dome construction, and to give it a stable and solid substructure. Above the mezzanine story there will be eight large arches, of iron construction, about 40 feet in diameter, spanning the eight sides of the octagon, which will be pierced with numerous windows for the admission of light. The light will reach the reader at an average angle of 45° to the horizon, which is the best possible angle for convenient reading. The light in the British Museum is admitted in the same manner, and it was found

that the light which originally entered from the central skylight was of no utility for *reading purposes*, and caused great annoyances from leaks, etc. It was therefore closed up, thus depending solely upon the light from the high side-lights, which afford a well-diffused and most agreeable light for reading. As an example of the inefficient and illy-diffused light coming into a large, round space from windows *very high up*, the rotunda of the Capitol might be given, where, with the vast amount of light-surface from the row of windows all around, the floor is but insufficiently lighted. The passage next to the windows and through the buttresses will serve for communication, and for regulating the light with shades during sunshine. Gas-burners, with reflectors, will be used for the evenings, which will throw the light from the same direction. The great reading-room is approached from without through a vestibule, in which are located two grand flights of stairs leading to the second-story exhibition rooms of graphic art, etc.

The wings containing the book repositories will radiate from the central reading-room, in the manner shown on the drawing. The anglespaces are utilized as open courts, through which a plentiful supply of light and air is admitted. These courts will be faced with white enamelled bricks, to reflect as much as possible of the daylight into the windows which light up the book-corridors. The section shows one of the radiating and intersecting wings, from which will be seen how the light penetrates and diffuses over the entire space. In fact, all the available light has been utilized, and only the roof immediately over the book-cases has been covered by a close and watertight copper roof.

It is a fact that skylights are, with the best workmanship and the greatest care of construction, more or less subject to leaks, and books should therefore, under no circumstances, be placed beneath skylights. Perforated floors transmit the dust from the upper stories, and greatly reduce the diffusion of light in the lower stories; the platforms, floors, and galleries will therefore be made of prismatic glass floors. The wings are, in themselves, compartments, and are provided with iron sliding-doors of

double thickness, filled with asbestos, thus made fire-proof. The iron partitions between the backs of the books will be made fire-proof in the same manner, thus reducing the danger from fire to an actual minimum.

By the introduction of hammer-glass floors in the first story the basement will be made available for shelving purposes, if desired. In the British Museum the basement of the library portion is used for newspaper files. There will be a covered porch opposite the main entrance, for wagons to drive under. Boxes, etc., containing books, etc., will be unloaded on to a platform, from where they will be put upon a tramway and pushed into the assorting rooms, where they will be unpacked and assorted according to their classification, and lifted to their assigned story by dumb-waiters. Speaking-tubes and telephones will facilitate matters.

In the front wing of the first story there will be the offices of the librarian and his clerks, correspondents, accountants, etc., for the administration of the library and the copyright department.

In each of the four corners of the building there are square rooms, which may be used for special reading-rooms; or they may be utilized for special illustrated works, rare manuscripts, etc., exhibited in glass cases. The entire upper floors of the quadrangle will be used for the exhibition of maps, photographs, chromos, engravings, and all such works of the graphic arts of which our time is so prolific. Oil paintings are exhibited everywhere; but the facilities to examine engravings, bound up, possibly, in volumes, are extremely rare. A liberal exhibit of the same upon folding stands, such as are used in the Louvre Galleries, in Paris, would make them accessible to all, without being exposed to risks. These large galleries, or show-rooms, will have a height of 30 feet, with large windows and skylights, so as to afford the greatest amount of light possible.

To avoid the crowding of the many visitors, the rooms must be continuous; and but one exit should be provided, so as to control a large throng. The economy of administration demands only *one* entrance, and *that* must be so arranged as to be under strict surveillance of watchmen.

In summing up, the leading "motifs" may briefly be stated which guided in the preparation of this plan:—

1. Centralization toward the circular reading-room.

2. The acquisition of the greatest amount of light possible for all parts of the building.

3. The best arrangement for the expansion of its interior capacity, *i.e.*, to meet the present demand, and likewise that of a hundred years hence, *without extending the building*.

4. The accessibility of all parts of the building to the librarian as well as the visiting public.

5. The best arrangements for an economical administration.

6. The division of the structure into so many fire-proof and separate compartments.

7. Placing the greatest amount of shelving-space as near the centre (*i.e.*, the central reading-room) as possible, for the great convenience and economy of time to all parties concerned.

While libraries, for special purposes, may present different and, for their especial needs, better arrangements than those which I have the honor to place before you, yet you will pardon the assertion that, as it is the result of close observation and study of this subject for upwards of eight years, it might deserve your consideration, especially as some of the leading librarians of this country and of the Old World were consulted on the various and most important points in the make-up of this plan.

LIBRARIES WITH MUSEUMS.

BY DR. H. A. HOMES, N.Y. STATE LIBRARIAN.

LIBRARIES combined with museums in the same institution are desirable for a double purpose. One is that museums of science and art have an intrinsic value in themselves for the education of any community. The other is, that the association of the Free Public Library with Free Museums, in the same building and under the same trustees, increases the utility of and the interest in both, with the least of expenditure.

The museums contemplated are of any and every kind attainable. They will be either of science or of art, or of both kinds together. They will be such as will naturally be established as the result of the liberty given to towns by statute to tax themselves to maintain them. They should be allowed to embrace all the objects of human interest which it might suit the means, the taste, or the generosity of the citizens of a town to supply. In art they would by no means be limited to collections of paintings and sculpture, but would embrace every form of production from the hand of man. A mere enumeration of the objects which properly compose such art museums indicates the vastness of the field from which the supply

is to be drawn. It includes materials in pottery and porcelain; carvings in wood, ivory, and shell; inlaid and lacquered work; jewelry and works in gold, silver, copper, brass, and iron; textile manufactures, laces, embroidery, and carpets; articles of furniture and house decoration; arms and armor; engraved gems, coins, medals, seals; illustrations of architecture, engraving, typography, ancient manuscripts, historic pictures, and portraits. Many of the above titles carry with them the idea of archæology, and the collections would naturally receive whatever would portray ancient Europe, Rome, Greece, Egypt, and Assyria, reaching back to the prehistoric period of the Old World. The New World would be exhibited by means of the earliest memorials of human existence to be found here, coming down to all such as illustrate the civilization and customs of the native races of this hemisphere to the present time. The museums would include anthropology generally.

A collection of memorials to illustrate not the lost arts, but specifically the dead arts, that is, the arts which are no longer in use in advanced civilized society in ordinary life,

would be very instructive. Some of these dead arts, like those of the steel-yard and the tinder-box have probably never been seen in use by many of those who hear me.

There remain to be enumerated, museums of science, embracing the animal and vegetable kingdoms, with palæontology and comparative zoölogy; but I omit specific details of classes for want of time.

Now the first beginnings of a museum in the smaller cities or towns might be very heterogeneous in character, the objects contained in it having little classifiable relation to each other; and they might, in consequence, be despised by some man of science or art, who was familiar with better collections, and regarded them as valueless on account of their incompleteness. Yet we do not see sufficient reason that, on account of such miscellaneousness or imperfections, the importance of the museum should be undervalued; or that any object intrinsically worthy should be denied a place, provided a town could afford, or found it convenient, to keep it. The process of organizing the museum itself would be a matter of lively and inspiring interest to the many concerned, and out of these small beginnings results of great value might follow. Such collections as have hitherto been made by individuals, societies, or governments, of the products of human industry and genius, have been the centres of the greatest attraction to the visitors and residents of the cities of Europe. This is shown by the vastness of the figures of the number of those recorded as visiting the edifices containing them. The Salford loan exhibition was seen in 1867 by 567,000 persons. The Liverpool exhibition has been visited by 465,000 persons each year on an average of 17 years, to 1878, and by 478,000 persons in the year 1879.

Professor Frieze, in his paper on Industrial and Fine Arts Museums in connection with libraries, presents, in much detail and with clearness, the motives both for establishing museums and for connecting them with free libraries. The considerations by which he enforces the topic are many of them equally applicable to museums of natural history and of archæology. I shall not repeat his argu-

ments, but I am happy to be able to refer those persons to them who desire to accomplish something in this direction.¹

There may be differences of opinion as to the relative value of the refining and educating influence of museums of whatever kinds; still, all men of science and educators, even when they interpose objections and criticisms, do concede a certain amount of positive value in them for all classes. Mistakes may be easily made by a town, as in its making an attempt to have a collection more comprehensive than any means likely to be at its command would justify. Such mistakes cannot be avoided. But better plans, and ultimately the best plans, will be developed by a more extended experience. Yet we may fairly include the following as among the motives for maintaining museums at the public expense:—

1. The aid which they give to the industries of the country through the positive instruction which they impart.
2. The refining and elevating character of the change and recreation which they afford.
3. The stimulus which they give to the mind, by suggesting farther pursuit of the hidden knowledge which the exhibited objects indicate.
4. The frequent visits made to them by persons of all classes, showing how much they are appreciated, attest that they are the want of the many, and not a luxury for the few.

We are anticipating that in most cases the foundation would be laid by gifts from citizens. The sight of so many educational influences combined in a single institution—science, the industrial and fine arts, and books—cannot fail to impress the minds of wealthy citizens with a high opinion of its value to the town, much more than if they were separated, and perhaps remote from each other. Those of them who might not care to endow a library

¹ In the U.S. Bureau of Education; Report on libraries in the U.S., 1876.—For the same reason I add, C. C. Perkins's Article on Museums, in "North American review" for July, 1870; G. F. Comfort's paper in "Old and new," April, 1870; Reports of Prof. Henry to the Regents of the Smithsonian Institution, 1870 and 1876; Mr. Axon's paper in the "Companion to the British almanac," for 1869. The latter publication for fifteen years past contains in almost every annual issue interesting pages on libraries and museums.

might be ready to endow a museum, or to enlarge by their free offerings the one rather than the other, and thus really to contribute to the efficiency of both. The marked tastes of individuals for encouraging different forms of human activity has its origin in our common nature; and men with these tastes cannot fail to be stimulated by the sight of such collections, and to receive such impressions of their value to the community, that they will be tempted to exercise their munificence by contributions in some form either to the museum or the library, and to endow the town, large or small, which they love, with such treasures as they possess or can purchase.

Some may regard museums, of whatever character, as only adapted to the great centres of human movement, and as having no practical value for cities of less than 50,000 inhabitants. We think, however, that the inhabitants of such towns would regard museums with more interest than the inhabitants of the larger towns, where there are more distracting influences. They would make their home-life more satisfying and attractive. Those who might not be drawn by the library at first would be attracted by the objects of the museum, and ultimately become the zealous frequenters of the library. Many of us can recall the very place, in some small collection of objects of art or nature, where we received our first awakening to the wonders of the one and the possibilities of the other; and we might add that the influence of those early impressions has shaped our impulses and aims ever since. It is appropriate to the subject, and to the city where we are assembled, that I should cite the language of an honored secretary of the Smithsonian Institution, lately deceased. Prof. Henry, who did not overestimate museums as a means of popular education in nature and art, wrote:—

“Advantage should be taken through museums of a feature of the human mind essential to progress,—the desire for novelty,—to lead the public to the employment of the intellectual pleasure derived from the study and the contemplation of nature. It is truly surprising how tastes may be formed, how objects, before disregarded, may, when viewed as a part of a

natural family, be invested with attractions which shall ever after render them sources of refined pleasure.”¹

In recommending the establishment of museums with libraries I have referred to the advantage to be derived from their being administered by a single Board of Trustees. Each would be created, developed, administered, and protected under the same general law. One portion of the trustees would practically have charge of one branch of the work, and the other portion of the other branch, while the united members would afford each other mutual counsel and support. At the outset a moderate-sized building would accommodate both the museum and the library. A library built upon the present modern plan of storing books compactly, like the Roxbury Public Library, or the new addition to Gore Hall at Harvard University, would occupy comparatively little space. Its interior architectural elegance would be confined to the reading-room, temporarily adorned with paintings, statuary, and objects of art, and cabinets of natural history, to be removed, as the museum grows in size and strength, into adjoining rooms.

The first step necessary to give effect and speedy extension to this plan for uniting museums with libraries will be that in each State of the Union where a general law exists authorizing towns to tax themselves to maintain public libraries, the two words, “and a museum,” should be added by amendment to the statute upon the subject already existing; and a small additional amount to the tax for the expenses of the museum; whereas, in the first enacting of a general law for public libraries, in States where such a law does not as yet exist, museums will simply be included with libraries in the section providing for the maintenance of the new institutions. For our principal purpose in this paper has not been so much to recommend the establishment of museums, as that they be maintained with libraries by taxation as well as by donations.

Now, although it may appear to some equally novel and bold to recommend a plan for the

¹ Smithsonian Report of 1870.

wide extension of museums as free public institutions, as if they had equal claims with libraries on the score of public importance, yet the plan is neither new nor bold. Their utility is much better understood and acknowledged in England than in this country. The perpetuation for twenty-five years at South Kensington of such a museum of art and industry as the exhibition of 1851 at London had been, and since then continually enlarged and improved, has already given to England a fresh superiority in the arts of design as applied to manufacture.

Now, it is well worthy of note that when that phenomenal law of Great Britain of 1850 was enacted, the year before that exhibition, which allowed towns to tax themselves for the support of public libraries, it bore as its title "An act to enable town-councils to establish libraries and museums." Those museums were defined in a section of the law to be "museums of art and science." But even this remarkable law for "libraries and museums" was but an extension to libraries of the language of a law enacted five years before, entitled "An act for encouraging the establishment of museums in large towns." In 1845 Manchester had the only free public library in England. The object in both of these laws is defined to be "for the instruction and amusement (or recreation) of the people." The law of 1850 declared that the museum, as well as the library, should be absolutely free.

The successive amendments to this law of 1850, made in 1855, 1866, and 1877, extend to smaller towns and to combined districts the privileges of the old law, and they increase the amount of the tax which a town or district may levy. In 1877 a bill was introduced to make the rate of tax for these purposes as high as two pence in the pound. I have not discovered that it became a law. To facilitate the establishment of museums, a law of 1866 amended the act of 1850 in such a way that it was made lawful to join a library to a museum, or a museum to a library already established, without taking proceedings additional as required under the former acts.¹

By the statute of 1877 it was further enacted and declared to be consistent with the libraries' and museums' laws, which allow schools of art in connection with them, that under them towns might establish public schools of music also.¹

It is not surprising that in England, in the opinions of the educated class, intellectual and esthetical development of the nation should be intimately associated with the museum as well as with the library, when we recall the more than a century of existence of the British Museum, whose trustees have administered it as an institution containing both one of the largest libraries of the world and an immense museum of art and science. If, after a century of growth and development, a process of differentiation has taken place, and its natural history and some other collections have been transported to the South Kensington Museum, it does not even *suggest* that every new institution should be held to be bound to begin its life at the same stage of development in its first year, without having passed through any of the previous stages. It was interesting to observe that the British conference of librarians, under the influence of this great historic example, voted at the conference in 1878 that "the Council be recommended to . . . obtain government aid to meet local funds raised for library and museum purposes." I have naturally enlarged somewhat on the course pursued by England regarding museums and libraries jointly, on account of its intimate relations to the subject, and also because of the pleasure it gives to cite such admirable statutes, which will be a perpetual honor to her good name, and an honor to us to follow her example.

After the necessary legislation has been secured placing museums upon the same basis with libraries as regards municipal support, many suggestions may be made regarding various methods of filling museums with articles of value and interest. Ten years since one suggestion on the subject was gracefully made by R. W. Emerson. He wrote: "I do not un-

¹ British almanac, Companion, 1867, p. 207.

¹ Chitty, Supplement to Statutes of Great Britain. British almanac, Companion, 1869.

dervalue the fine instruction which statues and pictures give. I think the public museum in each town will one day relieve the private house of the charge of owning and exhibiting them . . . I wish to find in my own town a library and museum which is the property of the town, where I can deposit this precious treasure, and I and my children can see it from time to time, and where it has its proper place among hundreds of such donations from other citizens, who have brought thither whatever articles they have judged to be in their nature rather a public than a private property.¹

In accordance with this thought we are justified in hoping, from the experiments in Great Britain, that one of the resources for founding, sustaining, and enlarging museums will be by deposits and loans. I do not refer to those occasionally very interesting exhibitions of collections of paintings and of archaeological material which are loaned in cities and towns for a few weeks for the public use, but with a fee for admission; but rather to such loans as are made of the same classes of objects for a year, or for several years, to some organization that can guarantee safety and protection to the articles. It is found possible that after a period these works of art can be exchanged for the exhibition of new ones in their place, through the kindness of other persons. Their owners even are enabled to discover beauties in their treasures, when rightly displayed, which they had never discerned before. It is with the help of frequent exhibitions of loan collections of mediæval and modern art that the South Kensington Museum has attained its present magnificent proportions; and, in addition, it has a system for circulating its own treasures, precious works of art, throughout the provinces, by means of a large staff of officers, and these works are again returned to the museum.

The India Museum of London, with the co-operation of the government, deposits with various museums the natural and art products of all India, many of them sent to England for the purpose.²

In the administration of the Smithsonian Institution the regents are carrying out, on a grand scale, the wishes of its founder,—"the diffusion of knowledge among men." They have distributed, according to a late report, more than 250,000 objects of natural history to various institutions in the country. It receives contributions from geographical and naval expeditions of the United States, and receives exchanges from foreign institutions, and is eager to contribute from all of them to the institutions which apply. Besides this work of the Smithsonian Institution, Congress devotes \$20,000 a year to sustain the National Museum at the Capitol, chiefly for natural history and anthropology, and the government sustains museums in the agricultural and the surgeon general's departments and in the general land office.

Those desirous of forming museums of art and science would soon become familiar with the channels through which materials might be obtained, and the museum be begun with economy and efficiency by means of copies of both natural and art objects in casts and paintings in oils.¹ Casts of sculpture can be obtained from Paris, Munich, and Naples, and casts of fossils of every size from Mr. Ward, of Rochester, all at moderate prices. Just so far as the funds at the disposal of the several institutions would allow, the opportunity might be improved of enhancing the practical value of the collections, by means of lecturers or guides to explain the significance and relations of each article,—a measure to be applied in the same spirit as in the plans adopted for opening the treasures in libraries to readers by special teachers.

I have learned that in Great Britain, under the libraries and museums statute, there are 23 towns that have availed themselves of its provisions to establish the two in connection; and I do not count among these some towns that have museums and libraries independent of the statute. Liverpool stands out in honorable prominence among all the cities of the kingdom, in having upon a single street a

¹ Society and solitude, p. 117.

² Nineteenth century, June, 1880.

¹ U.S. Libraries report, 1876. Prof. Frieze's paper, p. 443. C. C. Perkins, in "N.A. review."

range of four public buildings of imposing architecture, designated as the Walker Gallery, the Museum, the Public Library, and the Picton Reading-room, — all of them devoted to the free use of all her citizens.

We cannot point to the public museums in connection with public libraries which are maintained by towns in our own country, because we have no laws authorizing them. Such combined libraries and museums as do exist, like those of the Boston Athenæum, the Lenox Library, the Peabody Institute, and others, are proprietary institutions, and those of our colleges may be mentioned in the same connection. The statistics showing the number of cases where the same trustees superintend both a museum and a library are well worth collecting. They should show how recently they have been founded, or have received fresh development, and the extent of the privileges accorded to the public.

My apology for presenting this topic before you, in spite of the obvious fact that so many must be already familiar with it, is that it has never before been introduced before the conference, and, as we acknowledge ourselves to

be propagandists, it did not seem proper that the subject should be ignored in our programmes, as though we regarded it as one of slight importance.

Much of my encouragement to present it came from the thought that we were holding this conference in a city, the seat of government of the nation, which is not yet a hundred years old; and yet is a city which may be counted among those which have the largest collections of books, and that more of these books are by their freshness adapted to answer the questions which most occupy the minds of the student than those of the libraries of any city in the land. I knew also that, in visiting the various museums established here, all our members would have evidence of the vast influence collections of like nature must have, wherever planted, in building up in the community a sterling manhood. I felt confident that in the sight their patriotism would be inspired with the hope that our countrymen, everywhere enjoying religion combined with knowledge, and exercising industry combined with culture, would become partakers of a life possessing elements of continuous growth and development.

REPORT OF THE COMMITTEE ON THE DISTRIBUTION OF PUBLIC DOCUMENTS.

BY S. S. GREEN, LIBRARIAN OF THE FREE PUBLIC LIBRARY, WORCESTER.

THE committee of this association appointed to consider the subject of the distribution of public documents present the following report:—

If it is the object of the government, in the distribution of public documents, to dispose of them in such a manner as to make the community acquainted with its doings, it cannot better effect this object than by making a large use of public libraries, — instruments already existing and vigorous — for the free, or comparatively free, dissemination of information. Such institutions are, in most parts of the country, permanent also.

Libraries are, at present, used by the government as channels for the distribution of docu-

ments. A larger use should be made of these channels.

A part of the system now in vogue for distributing documents is infelicitous. It is a notorious fact that a considerable portion of the public documents distributed otherwise than through libraries are sold to dealers in old books, in Washington and elsewhere, for a few cents a volume. To give a single example: a gentleman who wished to buy a set of the "Congressional Globe," covering the period of reconstruction after the late domestic war, was enabled, such had been the price paid for the volumes by the dealer, to purchase them, in this city, for 25 cents a volume. These books cost the government, say, \$2.25 a volume.

Many members of Congress distribute documents given them for this purpose conscientiously, and with the object of disseminating, in the best way, the information they contain. Thus large numbers of these are sent to libraries and other institutions that have large constituencies. Some members of Congress, however, — and most of them to a limited extent, — give documents at their disposal to such persons, in the portion of the country they represent, as apply for them, and to influential persons whom it is for their interest to conciliate or reward.

As citizens and librarians we are unwilling that money raised by taxation should be wasted in printing documents to be disposed of in these ways. In the interests of economy, it may be stated, that further waste arises from printing, for the immediate use of Congress and the other departments of the government, of a very much larger number of copies of documents and bills which are to remain unbound than are really needed. Thus, of 1,900 copies of reports, executive documents, etc., usually ordered by Congress to be printed, say 800 or 900 on an average remain unbound. If 50 volumes are issued in a session of Congress, there would be printed, of documents not to be bound, 40,000 or 45,000 volumes. It is stated by an officer of the government, who has the best means of knowing, that a large proportion of these volumes find their way into the waste-paper basket, and that 400 copies, instead of 800 or 900, would supply the existing demand for them.

Attention should also be called to the fact that it would lessen, very considerably, the amount of money spent annually for printing were all documents printed by order of Congress to be sent from the printing-house of the government to a single distributing agent, — say the Secretary of the Interior, — to be sent out by him to persons and institutions, on the order of such persons as have a right to control their distribution.

Suppose, to illustrate the subject by an example, Congress orders 4,000 copies of some document to be printed, and directs 1,000 copies to be delivered to the following recipients: namely, the Senate, the House of Represent-

atives, the Secretary of the Interior (for distribution), and the department of the government particularly interested in the subject-matter of the report. Of course it is possible that four copies of the work printed will be sent, by the different distributing agents, to a single person or institution. Were all documents to be sent from the Interior Department, it should be stated, in the letters accompanying their despatch, at whose request they had been sent.

The committee believe that a radical change is needed in regard to methods now in use for the distribution of public documents, and that all documents of interest to any considerable portion of the citizens of the United States should be put on sale subsequent to publication, at a price which is only a small advance, say five per cent., on their cost.

The existing law on this subject is inadequate in its provisions, as it makes it necessary for a person wishing to buy a government publication to give notice that he wishes to do so before the document is printed. A sufficiently large edition of documents in demand should be printed to make it sure that persons wishing to buy them can do so after they learn of their existence, which does not generally happen until after their issue.

The committee wish to call attention, in this connection, to provisions in the laws of Great Britain respecting the distribution of public documents.

In that country, where the system of selling all public documents and parliamentary publications has long prevailed, the number of any document printed varies from 1,000 to 2,000, and is determined by a printing committee. One copy, and that only, of the more important papers goes to each member of Parliament. The rest are kept for sale at a fixed price, to cover cost; and the costliest "Blue book" in folio, no matter how thick a volume it may be, rarely costs more than three or four shillings, while the average is but 3*d.* or 4*d.* From the evidence of Wm. Rathbone Greg, controller of the Stationery Office in 1873, it appears that the whole public printing, binding, and stationery and blank book supplies, including parliamentary and department job printing, cost £450,000. The Record Office and War

Office publications pay their entire cost by copies sold. The London Gazette (official advertising and government organ) pays a profit of nearly £30,000 per annum over its cost. The documents sold bring in annually about £40,000. Your committee are of the opinion that it would be not only in the interest of public economy, but of the diffusion of information to those who can best use it, to have government publications sold at a fixed price, and the proceeds paid into the printing fund. This would reduce materially the number of copies printed, and the extravagant cost now so much complained of in the public printing would be kept within narrow limits.

Of course it is the wish of this committee that members of Congress and the officers of the government, in its executive and judicial departments, should be amply supplied gratuitously with whatever number of copies of public documents are needed by them in the discharge of their official duties.

The committee also believe that copies of nearly all government publications should be placed in a large number of libraries, situated in centres of population where they can be conveniently consulted by citizens for purposes of reference, free of cost, to these institutions.

Turning now to the especial concerns of libraries, the committee wish to point out how existing laws and arrangements for supplying libraries with public documents might be advantageously changed.

The provision of law relating to the distribution of documents to libraries designated by members of Congress is capable of an interpretation which would allow congressmen to change every Congress the library designated. Should this interpretation prevail, citizens might be put to great inconvenience when new members of Congress are chosen, or in consequence of shifting moods of members during their terms of service. It might become necessary for inquirers wishing to consult documents of a series of years to go to several libraries, in towns distant from one another, before they could find the information sought by them.

The interpretation, however, put upon the law to-day in the Interior Department is, that when libraries have once been designated by

members of Congress, public documents must, as a general rule, be sent to them until it becomes apparent that they are not fit depositories for them.

It seems best that in so important a matter the interpretation of the law should be evident, and that it should be clearly provided that a library once designated by a member of Congress shall continue to be a depository of documents until it ceases to be a proper place of deposit.

As the law now stands, designated libraries are only entitled to receive documents if a sufficient number of sets are in the possession of the Secretary of the Interior to supply them.

The right of the designated libraries to receive documents should be made absolute.

Four hundred and twenty-three copies of the executive documents are now sent by the public printer to the Interior Department, to be distributed to State and territorial libraries, and to incorporated public libraries, athenæums, colleges, boards of trade, etc., designated as depositories, by senators and members of the House of Representatives. The law, it seems to this committee, should be so amended that, with slight exceptions, all books, pamphlets, and maps ordered to be printed by Congress, and not executive documents alone, should be sent to these 423 libraries. These are the large libraries of the country, and are situated at centres of population. The committee have tried earnestly and persistently to formulate a recommendation that would include the delivery to the State, territorial, and designated libraries, without action on their part, of all important documents issued by the various departments and bureaus of the government; but have been unable to do so. The best suggestion that occurs to them, under existing circumstances, is, that Congress should be asked to leave discretion with the public printer to send, at its expense, to the Secretary of Interior, such department and bureau documents, not also ordered by Congress, as he thinks it desirable the above-mentioned libraries should have.

The number of this class of documents not ordered by Congress is not large, but large enough to make it desirable that some arrangement should be made by which such of them

as are of public interest should be made readily accessible to citizens, through libraries, without the necessity on the part of librarians to beg them from heads of departments and bureaus, either directly, or through the intervention of a member of Congress, or some friend of influence.

The committee believe that there exists considerable readiness on the part of many influential members of Congress to help State, territorial, and designated libraries to procure almost all documents ordered to be printed by authority of Congress. They make this statement after conference with influential members of the Senate, and after noting the tone of a little debate respecting printing more copies of the "Atlas of Colorado," by F. V. Hayden, which sprang up in the Senate, and is reported in the Congressional Record of February 1, 1881. The committee judge also, from the tenor of this debate, that there is a growing readiness on the part of members of Congress to have a large enough edition of public documents of popular interest published to allow of copies being put on sale after publication.

In regard to the matter of allowing members of Congress to designate more than one depository the committee are compelled to report that the expense which would result is a serious objection to the arrangement.

The committee have labored zealously to form some plan by which all libraries of, say 5,000 volumes, which are not now receiving public documents gratuitously, should be enabled to procure them with little effort, and without cost.

There are, perhaps, 600 libraries of this class besides those which now receive documents by law. It was hoped by the committee to form a plan by which, say 20, of the most desirable public documents should be sent to every one of these libraries that wishes for them. Here, again, the expense proved an obstacle. The selection of a committee, at once competent and disengaged, to pick out, before publication, the volumes to be sent to these libraries, also proved a serious obstacle.

The committee believe that changes in the laws regarding the distribution of documents must be attempted only gradually, and have

therefore reluctantly come to the conclusion that it is not well for them to try to attempt to carry out this project, although they have it much at heart.

In regard to the plan of changing the manner of designation of libraries so that libraries of a certain size, rather than those in certain localities, shall be designated, the committee are of opinion that an attempt to make such a change would meet with great opposition from portions of the country where libraries are small.

It seems to this committee important that a list of all publications ordered to be printed by authority of Congress, or the departments, should be issued annually, and that a list should also be published of all documents printed for the last few years, say since 1870.

A bill is now before the Committee on Printing (46th Congress, 3d sess., Senate 2119), having for its object "to authorize the publication of a descriptive catalogue of all government publications from July 4, 1776, to date." The bill provides for an appropriation of \$5,000 for putting this plan in execution. It is the opinion of this committee that it is utterly impracticable to do the work contemplated without a very much larger expenditure of money.

The committee think it important that documents should be delivered to libraries as issued, instead of once a year, as at present, and hope that the capacity of the printing-house and the number of assistants of the superintendent of the distribution of documents, may, if practicable, be sufficiently increased to bring about so desirable a result.

Public documents are sent to State and territorial libraries, to historical societies, and certain other institutions, without charge for transportation. As the law is now interpreted in the Interior Department, libraries designated by members of Congress as depositories have to pay freight charges for transportation of books received from the government. This is a somewhat heavy charge for libraries distant from Washington. It seems to the committee that all institutions should be placed on the same footing in this respect, and that public documents should, by an arrangement with the Post Office Department, be sent to all libraries free of charge for transportation.

The cost of carrying out the recommendations of this report has not been ascertained. It cannot be large, however. Our main request is, that additional copies may be printed and distributed to libraries of documents which Congress decides to order for the use of its members.

In estimating the cost, therefore, of these additional volumes consideration should be had only to the expense of paper, presswork, and binding.

For a summary of the laws regarding the distribution of public documents which have prevailed in the United States, and which are now on the statute-book, the committee refer the inquirer to the special report issued from the Bureau of Education in 1876, entitled *Public Libraries in the United States of America*.

The laws which now regulate the distribution of public documents may be found in the Revised Statutes of the United States, chapter 7.

For examples of the latest attempts which have been made to secure reasonable regulations regarding the distribution of public documents the committee refer interested persons to a bill to reduce the expense of the public printing and binding, and for other purposes (46th Congress, 1st session, H.R. 447), and a bill for supplying State and other libraries, incorporated colleges, athenæums, literary and

scientific institutions, or boards of trade, with all public documents printed by order of Congress or the departments (46th Congress, 2d sess., H.R. 4922). Both of these bills have been read twice, referred to the Committee on Printing, and ordered to be printed.

In conclusion, the committee recommend to this Association that, while making haste slowly, it do something at once; and, as a first step towards securing better methods in the distribution of public documents, empower a committee to have a bill prepared, and brought to the attention of Congress, embodying provisions for the delivery by the public printer to the Interior Department, with slight exceptions, of all books, pamphlets, and maps ordered to be printed by Congress, to be distributed to State, territorial, and designated libraries, and for the publication of a list of all public documents (including pamphlets and maps) printed by order of Congress, or the departments, and bureaus, since 1870, and of an annual list of such publications hereafter.

SAMUEL S. GREEN,
for the Committee, consisting of
J. W. M. LEE,
A. R. SPOFFORD,
SAMUEL S. GREEN.

The report is concurred in by the three members of the committee.

THE PLACE OF LIBRARIES IN A SYSTEM OF EDUCATION.

BY CHARLES WARREN, CHIEF CLERK OF THE BUREAU OF EDUCATION.

YOU have come here from many parts of the Union, representing libraries of several kinds, situated in communities of high culture, and it may seem presumptuous in one who is no librarian to speak to you on any subject connected with libraries. I hope you will forgive my presumption, because the Bureau of Education, which I have the honor to serve, has always taken great interest in libraries, and has done what was in its power to promote their welfare, and to educate the sentiment of the country up to their liberal support and steady use.

I also feel more justified in occupying a small portion of your time because my official duties continually lead me, as perhaps yours do not, to an impartial consideration of all our instrumentalities for instruction and culture, from the primary school to the university.

Perhaps a word of apology may be thought proper before proceeding to consider the place of libraries in a system of education. Yet I can hardly think much apology necessary when I remember that just a year ago, and in this very city, one of the most efficient and most

acute of our public school superintendents read a paper on "the best system of schools for a State," wherein no mention at all was made of libraries as one of the instrumentalities of public education. In justice, however, to this gentleman, I should say that a later utterance from him in another form, gives full credit to the library as a factor in culture.

Writers on pedagogics have recognized more or less fully that the education of individuals, based on their heredity, is carried on from the cradle to the grave, whether consciously or unconsciously, whether willingly or aimlessly, by the influence and appliances of family, school, vocation, religion, and government. The progress of humanity has developed and has been developed by these forces, whether they or any of them be originally the outcome of purely human conditions or not.

Each of these five great institutions of civilized life, and thereby great educating influences, can be modified very powerfully, either for good or evil, by the influence of instrumentalities arising from them naturally or devised for their application to the necessities or the desires of man. In this particular these secondary instrumentalities only follow the law of development of the five great educating and institutional forces I have named.

Among these secondary and modifying instrumentalities, the most promising for the future harmonious and happy development of a free modern state and society will, I believe, be libraries, — libraries suited by variety of size, of contents, and of administrative methods to supplement the work of the five primal factors. As librarians, it becomes you rather than me to consider how best to do this for people in their industrial, social, religious, and political relations. I propose to confine myself to a brief consideration of the ways in which libraries may and should aid the work of the school in our day, and particularly the systems of public education established by the modern community for the instruction of every individual and the ultimate promotion of all public welfare.

Gentlemen, your opportunity is greater than any ever afforded librarians in any previous age. The librarians of early Egypt served only the

priests; those of the Ptolemaic period served only a few hundred sophists, grammarians, and philosophers who were attracted to Alexandria for private study or personal aggrandizement. The monkish librarians of the middle ages probably destroyed as much of the antique lore in their custody as they handed down for our delight and instruction. The librarians of the Renaissance at most were approached by only a few thousand of scholars, and the luxury and corruption which succeeded speedily the glow and fervor of the revived learning turned them mostly into refined and selfish hoarders of intellectual wealth instead of earnest and conscientious dispensers of the material at their command. To you, gentlemen, not priests nor scholars only look for help. A great nation of free people, yearning for true guidance, and a great profession of 300,000 teachers, are looking to see what the librarians and libraries of the present and the future can and will do for the good of all.

The necessities of our national life have developed the New England town school of the past into the free public school of the present day. To it are committed the transformation of the raw human material, native and foreign, black and white, of various creeds and several races, into American citizens. Bishop Frazer, Messieurs Hippeau and Buisson and other writers have recognized this function of the public school. As the most universal and, therefore, the most important kind of school in our midst, it demands and should receive the intelligent assistance and coöperation of all other schools and instrumentalities of instruction. As I have already stated, the library, and particularly the public library, for the present and the future, can be made the greatest of these aiding forces. Libraries can be used in aid of public instruction, *first*, by helping the work of the teacher in educating his pupils; and, *second*, by furnishing the teacher with material for his own improvement.

The library's relation to both pupil and teacher is like, yet unlike. Like, because to both it is for present information and future culture; unlike, because it is chiefly culturing to the pupil and chiefly informing to the teacher. The pupil must be assumed to lack,

to a greater or less extent, the tastes, aptitudes, and powers which characterize a cultured mind. The teacher, while under tutelage, should have acquired these characteristics. Therefore the application of the library must be different in each case. So, the true physician prescribes one form of nutriment for the growing child and another for the completed adult. The one indispensable condition of the child's continuance in life being growth, and the chief and most important requirement of the adult being stability of power attained. Thus mental life and development imitate and run parallel with those of the body.

Now, teachers have already received in many places a great deal of help from libraries and librarians in their work of instructing their pupils. Both teachers and librarians have united in careful study of the child's natural development in selecting progressive courses of reading for him, in devising methods for encouraging his own powers of research, etc. To a Congress of Librarians it is useless to recapitulate the work done in this direction by men some of whom are attending this Convention and perhaps listening to these words. Honor and thanks are due those gentlemen for the help they have given and will, no doubt, continue to give, in this joint work. Nor is there any reason to doubt that new methods will be devised to meet new conditions. All that is necessary is that what is done, past or future, should be promptly recorded and the information respecting it distributed as widely as possible, in order that the number of teachers and librarians coöperating may know about these matters and use them in an always increasing degree. No doubt, too, librarians in towns and cities have aided much the teachers of their communities in improving their own knowledge of books. Perhaps thirty, forty, or fifty thousand of the three hundred thousand teachers in the country have opportunities of this kind, but the quarter of a million who teach in country districts and in little towns have no such resources. There are no libraries from which to procure books, no librarians to consult. State governments have established normal schools for the instruction of public school teachers, but the number so

trained cannot be ten in a hundred of those actually engaged in public school work. Normal institutes do something in aid of this professional training, but there are doubtless hundreds of thousands of teachers who are not reached thereby. County, borough, and town superintendents of schools, by visits and inspections, influence many not otherwise reached; but the crying want—good teachers—is one felt in every State in the Union, and they are needed most where their absence is least felt.

Right conduct and true culture are the ends men should seek, the first being, as even culture's modern apostle, Matthew Arnold, says, three-fourths of life. In any true scheme of education both should be considered; but all the factors in our American life encourage right conduct, and the character which produces it; while in many parts of our country they discourage true culture, and do not afford instrumentalities for its acquirement. This is true of the teachers as it is of the community. The master or mistress of the free public school usually is a person of good character and upright conduct, but lacking in mental discipline, and in a proper variety of information.

Now, gentlemen, and especially you who are paid by the communities in which you live to be custodians of public collections of books, the teacher, and especially the public school teacher, should be the object of your particular interest. By concerted action of the school authorities, by conversation and correspondence with individual teachers, by arrangement of books, by methods of publication, and other ways which will suggest themselves to your minds, you can do more to supply him with mental nutriment than any one else. What you do for him now will act with tenfold force and effect among his pupils, for he is training your future readers of books, and the friends and patrons of libraries hereafter. But how can we reach the quarter of a million instructors beyond your influence, scattered all over the States and territories? The State organization of public instruction is an instrument made to your hand. In it we find a State superintendent or State board competent to order action and the local officers through whom

to act. While other means may be better adapted for the end I have intimated, I venture to suggest one which has occurred to me as possible. It recommends itself to me also because, even before State action can be had, it may be used with good effect within the circle of their influence by cities and towns possessing public libraries.

Every such library, whether established by State or local power, should be granted means with which to purchase and lend each teacher a few books for his personal reading. These should be returned at some specified time. Of course the teacher's reading should be useful, that is, partly about his business and partly designed to nourish his mind and add to his knowledge of the conditions under which he lives. Suppose that every school-teacher in the neighboring State of Virginia could have during a few months each year, for private reading, five books; let us suppose that these for the first year comprise a volume of history, such as "Green's Shorter History of the English People;" a volume of literary value like Swinton's "Masterpieces of English Literature;" a volume about practical morality, such as Samuel Smiles' "Duty;" a volume treating some subject in nature, science, or art, like Tyndall's "Heat a Mode of Motion;" and a book treating of some subjects of education, such as Swett's "Methods of Teaching." I think that these books carefully read in the course of a school term, by the teacher, could not but prove of great value. When finished the books could be returned to the distributing agency for use by some other teacher. The

place of distribution should keep a record of the books supplied to each teacher, in order to collect the cost of any volumes not returned and to avoid duplicating titles in successive years.

Probably most public school-teachers serve as such not more than five years on the average; therefore it may not be advisable to supply more than five such collections to any one of them.

Nor is it at all impracticable to promote their use, for slight changes in school laws and methods of examination might insure that teachers applying for a reissue of their certificates should be subjected to questions framed on the contents of the books lent them during the previous year.

The cost of such an arrangement would doubtless be very large, even at the lowest wholesale rates that could be obtained; but Americans are not afraid of spending money for education; the only trouble is, that they do not always get all that they pay for. The additional outlay would almost immediately improve the quality of the instruction given, and thus would increase the amount, as well as the character, of the pupils' acquisitions.

The county-town in most States would be a convenient place for the depository of these ambulatory collections, and the deposited books might be called county lending libraries for teachers. The books could be selected and bought at wholesale, either by the State board of education, or by a board composed of the State school officer, the principal of a normal school, and some prominent librarian.

HEATING LIBRARIES.

BY MELVIL DUI.

I DESIGNED at this meeting to present the results of some studies on heating, rather to excite new interest and give direction to general experiments and observations during the coming year than to submit final conclusions. Lack of time compels me to omit most that I had planned to say, and I will print in the *Library journal* a tabular exhibit of my

present opinions. This table will be found a great convenience as a skeleton in which each may fill in the results of his own experience. The brief notes in my table will at least provoke thought and discussion, and at the Cincinnati meeting I trust the subject will have an exhaustive treatment that may practically settle it for libraries. Explanations follow the table.

	1. Open fireplace.	2. Open stove.
a. Safety against fire. 5, 1, 2, 3, 4.	a1 — Very safe. No smoke nor hot-air pipes. Defective flues dangerous with large fires. Sparks snap out from some wood. Coal safe.	a2 — Better than close stove, as outside is not so hot.
b. Freedom from dust, dirt, gas, smoke, and noise. 5, 4, 1, 2, 3.	b1 — Very dusty, dirty, and smoky. Noise of fire-irons and snapping of fuel.	b2 — Less than 1, but bad. Noise added.
c. Quality of heat. 1, 2, 5, 3, 4.	c1 — Best. Direct radiation from flame. Like heat of sun.	c2 — Next best. This is part 1 and part 3, and combines their qualities.
d. Influence on ventilation. 1, 2, 5, 4, 3.	d1 — Best known if properly combined with air supply.	d2 — Little inferior to fireplace.
e. Ease of distribution to different rooms, or parts of rooms. 5, 4, 2, 3, 1.	e1 — Practically impossible to distribute.	e2 — Circulates air in same room best. Can heat room above with dummy.
f. Space occupied by apparatus, 1, 2, and 3 being in each room. 5, 4, 1, 2, 3.	f1 — More than furnace or steam.	f2 — Same as stove.
g. Economy in fuel. 5, 3, 2, 4, 1.	g1 — Least. Costs most for heat given. Chimney sucks life out of the fire.	g2 — Good. Little inferior to close stove. Four times the fireplace.
h. Ease of running, 1, 2, and 3 being in each room. 5, 4, 3, 2, 1.	h1 — Hardest.	h2 — Harder than stove 3. Easier than 1.
i. Ease of keeping in order. 1, 5, 4, 2, 3.	i1 — Easiest.	i2 — Next to close stove, hardest.
j. First cost. 1, 3, 2, 4, 5.	j1 — Cheapest if built with building. Otherwise costs most.	j2 — Cheap.
k. Durability. 1, 5, 2, 3, 4.	k1 — Greatest.	k2 — Next to fireplace and steam.
l. Appearance. 1, 2, 5, 4, 3.	l1 — Best.	l2 — Next to fireplace.

3. Close stove.	4. Hot-air furnace.	5. Low-pressure steam.
a3 — Smoke pipes set many fires.	a4 — Worst. Hot-air pipes set most fires.	a5 — Safest. With right apparatus explosions are impossible or harmless.
b3 — Same as b2.	b4 — Gas, dust, and noise. Hot-air pipes are simply great speaking-tubes to carry every sound.	b5 — Nearest perfect. Poor piping will cause great noises; but it is noiseless when properly put in.
c3 — Apt to be bad.	c4 — Usually worst. May be improved, but heat rays, not hot air, is best.	c5 — Direct radiation. With proper attachments can be made best.
d3 — Worst.	d4 — Usually very bad. Can be made fair.	d5 — Usually bad. Can be made best.
e3 — Worst except 1.	e4 — Easiest except steam-pipes. Take room and are dangerous.	e5 — Best known. Small pipes go anywhere and cannot set fires.
f3 — Most.	f4 — Least except steam.	f5 — Vastly least. Boiler smaller than furnace, and pipes much smaller.
g3 — Good.	g4 — Worst after fireplace.	g5 — Best for large rooms or buildings.
h3 — Easiest in each room.	h4 — Easier than 1, 2, or 3 in each room.	h5 — Same as h4.
i3 — Hardest. Linings, pipes, drafts, etc., need frequent care.	i4 — Easiest after fireplace.	i5 — Same as furnace.
j3 — Cheapest.	j4 — High.	j5 — Costs most.
k3 — Greater than furnace.	k4 — Least.	k5 — Greatest except fireplace.
l3 — Worst.	l4 — Bad.	l5 — Good.

My study leaves me a decided preference for steam (if the right apparatus is used), and after it for the "fire on the hearth," or open ventilating stove. The least desirable means of heating is the most common, the hot-air furnace. I will only take time to urge every member to make careful observations during the coming year, and to get all possible light on this very important subject for our next meeting.

In my table which precedes I have lettered the various points to be considered in an apparatus a to l, and across the tops of the pages numbered the various methods of heating 1 to 5. I have omitted high-pressure steam, gas, and similar possible methods, which no one would think of using for a library, and also hot water, because of its great cost. A column should, however, be added for hot water, as some look upon it as the very best methods, where it can be afforded. It differs from steam chiefly in the large amount of radiating surface required, because the water is, of necessity, of lower temperature than steam, and changes of temperature are slower.

I have assumed to give, in a somewhat dogmatic way, my own opinion of the relative merits of each system, by arranging the numbers after each point. E.g., after point a, the figures 5, 1, 2, 3, 4, indicate that no. 5 or steam is safest, and no. 4 or furnace, least safe, and 1, 2, and 3, are safe in the order as arranged. The numbers refer to the various systems of heating. For convenience of making notes and references, I have numbered squares as signed to each point under each system. E.g., j 2 is the topic of first cost of the open stove; a 5, is the safety of steam. I hope my table, and the fact that this is to be a leading topic at

Cincinnati, will give rise to much correspondence this year, and in it the numbered topics of the table will be found very convenient for reference and for tabulating results.

I purposed printing the table with the squares blank, reserving my own opinions for further study, but the editor has thought it more useful to give my present notes as suggestive. I may wish to change some of them next year in the light of new investigations. These are made after personal experience with all the systems and observations of all the points, and after consulting something over 100 users of different systems. But in a multitude of counsellors, there is safety, and the opinions of 500 may change some of my conclusions, in spite of personal experience.

In order to get library data on heating from which to work at Cincinnati, I urge each interested to send to the editor of the *Library journal* answers to the following points:—

(1) Wood, brick or stone; (2) Sides exposed; (3) No. of windows and doors; (4) Height of ceiling; (5) Cubic meters or feet warmed; (6) Temperature in cold weather; (7) Method of heating; (8) No. tons and kind of coal used; (9) What changes if building new; (10) Remarks.

A little consideration will show that unless all the questions are answered, the facts will have little value. By tabulating the results we shall discover some important facts of practical value to us all. Fairness demands that each contribute his experience to the common fund. Those who have not all the necessary facts now can test the question during the next winter and report before the meeting of the A.L.A.

THE RELATION OF LIBRARIES TO COLLEGE WORK.

BY OTIS H. ROBINSON, PROFESSOR OF MATHEMATICS IN THE UNIVERSITY OF ROCHESTER.

COLLEGE work has for its end the systematic and liberal education of young men and women. We are to consider the relation of libraries to the work of such education.

Two classes of persons, and only two, are strictly within the scope of our discussion,—the teachers and the students. So far as college libraries are used by others, they partake of the nature of public libraries. Such use, however proper and important, is not included in the subject assigned for this paper.

Now, it may be assumed that the students, for whom the college exists, have, as a class, ceased to be boys, and have not quite become men. They are in the transition between the text-book with its daily task and the practical questions of science, history, language, and government. They enter college, if they have been well trained in the schools, with good powers of acquisition, and with the rudiments of language and of mathematics, and some of the general facts of history and geography. They go from college, if their student life has been successful, with power to add vigorous thought to acquired knowledge, to compare the opinions of men; in short, to lay hold for themselves of the difficult problems of life; whether practical or purely intellectual. As a class, it may be claimed for them that they are preparing themselves while in college to guide, rather than to be guided by, public opinion.

Of the college professors we may observe that they are not mere school-masters. They must indeed assign lessons; explain difficulties; conduct examinations, and maintain discipline. This is an important part of their work; but it falls very far short of expressing the great end of their lives. It is their function to gather up the learning of the past and give it such expression that it shall enter into the life of the future. Extremes excepted from ten to twenty men in each institution divide among themselves the several fields of thought which to-

gether make up a liberal education. Each one, if faithful to his trust, so makes himself master of his own field that the term "Professor" applied to him shall mean the acquaintance with, and ability to teach, whatever belongs to it. He is not limited by the demands of the classroom, or of the public about him. It is his province to stimulate inquiry, and so create a demand for all that has real value in his own department.

This requires a careful study of the past, for no science can be taught adequately apart from its history. Indeed, no man can be said to know a science thoroughly till he has studied it in its development, and become familiar with all the theories and opinions, false as well as true, which have contributed to its growth. The world has made progress, as individuals make progress, by making mistakes and profiting by them. But it is a significant fact that mistakes are ever likely to recur; false philosophy, long since dead and buried, is ever coming to the surface with new name and dress, and demanding a place. Even false interpretations of nature are constantly published as magnificent discoveries. What teacher of astronomy has not been confronted with elaborate discussions which would render universal gravitation unnecessary, and beautiful theories about the probable inhabitants of the moon? Now, how is the student class to escape these errors, and to distinguish accurately the truth? Certainly not by investigating every question for themselves. They have not time for that; and, besides, it would be a great waste of energy. If there is no royal road to learning, there is after all a road, and the teacher must be able to travel along it, year after year, with his classes, and give them the full benefit of his knowledge, and his experience in it.

Nor is it sufficient to know what progress has been made in the past. The college professor must be on the frontier with the investigator of

the present. Was anything discovered or invented yesterday he must know it to-day, bring it to his lecture-room with abundance of illustrations to-morrow, and next week devise a diagram or an instrument which will make it clear to the dulllest youth in his class. Indeed, he is expected to be an investigator himself, and add somewhat to the sum of knowledge in his department. This place he must assume with pioneers in order to keep his students abreast of the age. They must not be allowed to start in life a single year behind their time.

What, now, is the place of the library in this work? How can it be made the means of encouraging inquiry, communicating knowledge, and producing scholarship? Let us inquire in the first place what the college library should contain, remembering that it is to be adapted especially to the wants of professors and students. In pointing out what is best for this work let no one suppose that we would exclude anything else which the liberality of patrons might furnish. It is our purpose to notice only such as may be made directly available, and are necessary for the work we have described.

First of all are the works which have been made for the purpose of explaining and illustrating the several subjects belonging to the curriculum of study as such. For all the students, and for the younger professors at least, these form the regular working apparatus of college life. The library should be well equipped with them.

Next are the great works which are strictly representative. Everybody knows that the growth of every science has been marked by the appearance of works which have affected the state of the science ever afterwards, — works which, like the “*Logic of Aristotle*,” the “*Principia of Newton*,” and the “*Wealth of Nations*” of Adam Smith, the world can never outgrow. Now, the professor who represents, as it were, a department of learning in the college community, needs a good supply of these representative books in his department. There are also lives which are representative, and must be put into the same class with these great works. A very wide range of reading is now suggested; but for our present purposes it may fairly be limited to the lives and the works of the men

whose names are, by common consent, associated with the intellectual development of the world in the broadest sense, whether scientific, literary, religious, or political. We need not inquire whether these men have always been right, or whether any particular treatise is altogether trustworthy. In selecting this class of books the only question is, Has the life or the treatise such a significance as to make it prominent in any field of thought? Could the history of the department to which it belongs be adequately written without it? We might, indeed, prefer in our library the New Testament to the Koran, and yet the Koran is essential to the history of religious thought. The life of Napoleon and the life of Washington are alike important. Whoever has materially affected the thought or action of the world at large, his life, and the significant portion of his works, are essential to a well-selected college library. Take, for instance, the history of the physical sciences, — immediately come up the names of the men who have made these sciences what they are. Or take any discriminating history of the English language, and we have the men whose works have fixed our speech. In our college work we must have not only the names of these men and what they did, but, as far as we can, the methods, and the purpose, and the spirit with which they did their work. While we build upon the principles they established, we want at the same time to be moved by their devotion to truth, and warned by the errors they committed. The intellectual life of the present will thus have a healthy and permanent growth. The broad scholarship of the professor in each department will be planted on its true foundation, — the origin and development of ideas in that department; and the first efforts of the student towards such scholarship will be put forth in the right direction.

Another class of books, not less important to vigorous college work, consists of the philosophical and critical histories of the progress which has been made in the several fields of investigation. These connect together in logical order the representative works which we have described. They serve as an introduction to, and a guide during, the reading of them; and they help one to sum up the re-

sults of such reading. They are the teacher's constant resource. To teach the physical sciences ever so well without the works of Montucla and Whewell, or philosophy without Brucker and Ritter, would be to dwarf the scholarship of the classes by just missing the golden opportunity to stimulate their zeal, and enlarge their field of view by a knowledge of the men whose lives have been devoted to science and philosophy. Such works are classic. No man can lay claim to scholarship without an acquaintance with them. Indeed, it may be said that familiarity with this class of books, more than anything else, distinguishes the master from the mere mechanic in the profession of teaching. And it may also be said that a proper introduction to this class of books at the right time—when he has advanced just far enough in his course to understand and appreciate them—is more likely than anything else to beget in the student a desire and a resolution for a scholarly life.

Dictionaries and cyclopædias are mainly to be classed with the philosophical and critical histories, for in the study of them we are not to be limited to the latest edition of the *Britannica* or Webster's Unabridged. As a whole, the old and the new, they show us in detached portions much of what has been, as well as what is, in the several sciences. The college library wants a good supply of them. The old ones are often so cheap that the price is far below their value for educational work.

The classes of representative works and philosophical histories which we have mentioned have reference mainly to the historical element in our education. If we are obliged to limit our library to what is absolutely essential to good work, those classes need not be very large. In the study of any past age we want the prevailing thought of that age, the characteristics of its life,—intellectual, social, and moral. We want that in it also which materially affected subsequent ages,—the discoveries, inventions, and great principles to which it gave birth. We want to know also the lives of its great leaders. And, besides, we must be able to put together the prevailing ideas of successive ages, with their transitional periods in a system which shall be logical, and

not merely chronological. The books necessary for this work are not very numerous. Their character is, from the nature of the case, pretty well understood. This is, perhaps, the easiest part of the library to select. But when we come to the study of our own times, the intellectual activity of the present age, the case is somewhat different. What is representative? What is to affect the thinking and the life of the ages which are to come? Much which has the appearance of permanence is destined to be swept away by the next current of opposing thought. And, then, we must take knowledge of, and provide for, the progress which is going on. Discoveries are to be made, invention is to be carried on, progress to be secured everywhere. Now, we have assumed that our college professors are to be with their classes at the frontier in this work. They require, therefore, the means of learning perfectly the exact state of every field of inquiry, and of witnessing constantly the ever-shifting phases of human thought. These results cannot be reached through representative books. Much miscellaneous reading is required. They must know what every investigator is saying and doing. If it is Schlieman unearthing the relics of Troy, and thus throwing new light upon old subjects, they want to know every detail of his work, and understand how it will modify the opinions which prevail relative to ancient life. If it is Crookes, proposing to rotate his radiometer by the impact of light, they must at once know his work well enough to discover the error, or their well-studied theory of light will be broken down before their eyes. Every discovery, or supposed discovery, every new application of known principles, every improvement in method, every *ism* in philosophy, or science, or morals, or politics, in short, everything which can in any way be made useful in the training of young men, must be carefully studied by our college faculty. This requires such a supply of good modern books, in all the general fields of inquiry, that no vigorous thinking in their times can escape their notice.

It is just here that our magazines and critical essays, and particularly our critical and scientific journals, have special significance. It is their function to keep the hard-worked teacher up to

date, to proclaim what the world is doing, and from what books its progress can best be learned. Their labor-saving value can hardly be estimated. No human power can follow the details of all the investigations that are going on.

It will be seen from what has been said that there is little use in the college for the ordinary novel. Novels are wanted, indeed; we could not do without them; but they must be selected with the utmost care. Their educating value is not the chief, but the only criterion. They must so present their subjects as to give their readers not only a knowledge of life and manners, but a well-defined and trustworthy literary culture. They must be works of art in the best sense, the productions of master minds for the highest and noblest ends. This is no place to talk about the good or bad effect of rapid and indiscriminate novel-reading. Time, time is the precious element in all our plans. In the crowded years of college life let us not talk about reading anything but the best. It is not a question as to what shall be done by public libraries for the recreation of business men. For college men the use of the library is in no sense amusement or recreation: it is work. They may find their recreation at proper times in the fields, or on the water, but when they touch a book they must in some way be profited by it. Great acquisitions are to be made, intellectual character to be developed, scholarly habits to be formed. Every hour with books which do not contribute to these ends is lost. Unquestionably, therefore, the fiction in our college library should be limited to those works which by common consent give us the best delineations of character, the purest morals, and the best historical representations. We want only such as have become permanent treasures in the world's literature.

We come now to the mode of using a college library. The question is simply, How can the library be made the most powerful educational agent? Before considering this directly certain outlying facts should be mentioned which determine the kind of education needed.

First of all, the world is full of books. Not even in a special department of a single profession can one hope to read them all. And

still they come, books and periodicals almost without number. Most of these, it is fair to presume, are really demanded by the vigorous thinking and investigation of the age. Professor Newcomb tells us that "the progress of our knowledge of the sun [alone] during the past ten years has been so rapid that only those can completely follow it who make it the principal business of their lives." What shall we say, then, of the entire science of astronomy, though that itself fills so small a segment of our library?

We observe, also, that this vast number of books are, thanks to the public libraries, coming to be accessible to the masses, and read by them. The men and women with whom our graduates are to live, and by whom the value of their training is to be tested, are frequenting the libraries, and reading these books. And, besides, cheap reprints are entering in where the library is deficient, and adding greatly to the reading advantages of all classes.

Add now to these facilities for reading, the dissemination of ideas through popular lectures, and societies for scientific and literary study, and we are impressed with the fact that our college young man must look well to his work, or he will be little better off than his cousins in business life, who can devote to reading only their leisure hours.

How, then, shall the college use its library? The curriculum of study is necessary. Nothing could take its place. But the lowest view of education in a college which we can take is that which limits it merely to the learning and reciting of the lessons of the curriculum. No professor who is thoroughly alive, and who makes a proper use of the library, can fail to bring to his class-room, and add to nearly every lesson, a fund of collateral and historical information which will make the lesson to the class a real, practical, and valuable possession. But this is not all; the members of the class must be trained themselves to add this collateral and historical information. The end we seek is not altogether the knowledge acquired, but the method of acquiring it; not the thing done, but the capacity to do it. Nor does this capacity come without cultivation. Who has not known to his cost what it was to lose time in a library?

The helplessness of a beginner in a large library is something remarkable; and nearly all our students are beginners. The first half of his time is spent in finding out what he does not want to know, and the last half in getting a most confused idea of what he does want to know thoroughly. Now, it is just as easy to train a student to avoid all this, and to consult a library correctly and rapidly, as it is to teach him to survey a field, or write a Latin essay; and the chances are that the training will be of vastly greater profit to him. It is assumed that the student is to take on the habits of the scholar, and that the scholar's use of the library is mainly to investigate special subjects. The professor is to be, therefore, the guide and friend of the classes in their library work; and this work is to be kept up in a definite and methodical way from the beginning to the end of the course.

The classes of books necessary for our library have been described with special reference to this work. Who discovered the principles, or devised the instruments, or held the opinions, set forth in the text-books? Who opposed these opinions? What instruments were formerly used instead of these? Send the students to the library with these questions, and others like them, and let them bring the answers into the class-room. Refer them to the philosophical histories which have been mentioned. All sorts of mistakes will be made at first, and so much the more need of continued effort. Point out the mistakes and send them back to the library. More advanced students may have more difficult work. Let them read up the lives and what they can of the works of the great discoverers in science, and the authors in philosophy and literature, and bring the results of their reading before the class in a few well-digested statements. Let them succeed each other in such an order as to show an outline of the progress of thought in the subject of the study. This will make necessary the histories, and also the works of the great leaders of thought. Other topics will suggest themselves calling for the same classes of books.

And then we come to the modern thought and modern books. Here there is greater

danger of making mistakes. Opinions appear which are not well founded, theories which were long since disproved, hypotheses which are still unverified. It is not enough to say that false opinions may be received as true; indeed the whole current of a young man's life may be misdirected by a specious philosophy before time and a critical examination have shown its falseness. Here, if anywhere, the aid of mature scholarship is needed. Now, a professor who devotes his whole life to one department of study, who has made himself familiar with the origin and progress of thought in that department, as we have suggested, is prepared, in some measure, to distinguish between the truth and the error which are mingled in the stream of books that is constantly coming from the press. It is his province to guide and protect the classes in the examination of what is new, or published as such. If old errors reappear, he shows them the history of their former refutation. They are to waste no time on them. If doctrines are published which are clearly opposed to fundamental and well-established principles, he shows them how to anticipate their certain overthrow. And thus by his method, as well as by his learning, they are led to avoid solving over again the problems of the past. He keeps before them true standards of style in language and in art, by which they may themselves be judges of what they read and see. What is really new and important he explains, with all the circumstances of its discovery; and points out its influence on the department to which it belongs.

The question now naturally arises: What extended courses of general reading shall our undergraduates pursue? There seems to be in this scheme no room for any such courses. We frankly admit there is none. The years of college life are not years for a general course of reading, in the ordinary sense of that term. The opinion is ventured that very few young men ever acquire the habits of the true scholar by sitting down while in college to read through a series of books, however well selected. Neither scholarship nor the desire for scholarship comes in that way. Continued, it becomes dissipation, not education. Books in the hands

of a student are the means of studying subjects; they are not merely to be read through as an end in itself.

No one will deny that some general good may result from reading authors through by course; but the tendency of such reading is almost inevitably to diminish the power and the disposition to lay hold of difficult subjects. The general reader learns to crave the stimulus of other men's thoughts rather than to think for himself. If the student reads, then, in any department let it be for a purpose; let that purpose be definitely formed; and let the reading extend to as many good books relative to the purpose as time will permit. He will appreciate the style of the masters in English literature by a critical comparison of one with another more than by reading each by himself. He will enjoy a novel in a more intelligent way by making it the means of studying history, or language, or philosophy, or whatever it stands for in the field of letters. He has no time and no right to read for mere enjoyment. History, and the classics, and, preëminently, the physical sciences, must be read in the same way. All the good results of a course of general reading will thus be secured, and there will be added what cannot be overestimated,—the power and the habit of vigorous and continued thought.

We would not, indeed, except poetry from the application of this rule, though here, if anywhere; some license may be allowed. If a student would learn to appreciate true poetry, and make it the means of intelligent and delightful recreation in after life, he has no time to waste while in college skimming over a library of the poets. He is to learn what it is in a poem that gives it its power over the minds of men. He is to become acquainted with the different kinds of poetry, and the class of thoughts and feelings which each is adapted to express. A comparative study of a few good poems, therefore, with these ends in view, will do more to cultivate a genuine and lasting taste for good poetry than years spent in miscellaneous and desultory reading for pleasure.

We have alluded to the duty of college officers in assisting students in their use of the library. This duty should be emphasized. Nothing is easier than for a man of fifty to for-

get the great advantage his experience with books gives him over a youth of twenty. The danger is, if he refers to the subject of reading at all, that he will give loose and careless references to books and subjects which the student will either neglect altogether or wholly misunderstand. Very likely he will send a class of students to the librarian to have books selected for them, forgetting that no librarian can be acquainted with the books in his department as he is himself. Now, this is all wrong. If a man teaches a class physics, no man can know as well as he what should be their collateral reading on that subject. The librarian cannot point out to them where they will find the origin and history and practical application of the doctrines taught. He cannot keep up to date in all the discoveries, and show them where to find the latest verified theories, and the means of judging as to the unverified. We mean to say, that the librarian cannot do this in physics, and at the same time do it in history and political economy, and the languages, and so on to the end of the curriculum. The only methodical and truly successful course is for each professor to hold himself personally responsible for the reading of the students in his department, so far at least as to give them clear and direct references to books and parts of books with which they may investigate thoroughly the subject which he teaches.

This might be done in a schedule dictated to the class, or printed for their use. Having once done this work thoroughly it would only need such additions and revisions from year to year as his own reading should suggest. This schedule might be supplemented by class lectures on the character of the books referred to, and their places in the history of the doctrines taught. It might be put into the hands of the librarian, with such explanations of its use as would enable him to carry on in the library the work thus systematically begun in the classroom. By doing this, and it would require but little effort, the professor would add to the instruction given on the text-books more than he could ever estimate.

But even this is not the best that he can do. There is no magnetism in a printed schedule. There is a better method of teaching through

the library; and that is to go with your students personally to the shelves, and take down the books which they are to read, and tell them, as no one but a teacher can tell them, their meaning and their value. Every scholar knows the books which have taken hold of him, enlarged his power of thought, given scope to his intellectual vision, made him what he is. He knows the books which have made scholars of other men. Let him not forget that these books may do the same for the generation of students under his training. Let him inspire the student with his own love for the masters in his chosen field of labor. Nowhere can this be done as well as in the library. Here they are represented by their works. Here he can unfold the doctrines they have taught in order, with all the errors they have had to overcome. All this will arise naturally and easily as the books are taken down one after another, and made the subjects of the conversation. Here he has the student face to face. No young man can resist the influence of mature scholarship so devoted to his personal good. He cannot but go from the place resolved to know more of the men and the books which have wrought so much in the history of the world's progress. It is a question which modern teachers may fairly consider, whether an elaborate system of text-books has not drawn them too far from the ancient method of Plato and Aristotle. Would we not do well to revive in our libraries the spirit of the Academy and the Lyceum?

It is not to be denied that there are great difficulties about a work like this. First of all it is laborious, — an extremely hard thing to do and to keep doing year after year. We know no answer to this objection, if it be an objection; but the true teacher is not seeking for the easiest, but the best way of doing his work. And, then, a professor may be taken at a disadvantage. He cannot prepare himself for every question which may come up in a library conversation, as he can upon a lecture for the class-room. So much the better, we say, if he is driven out of the ruts which he is likely to fall into, by the real and pertinent questions of vigorous students. The exercise will often do him as much good as it does

them. If pushed to unfamiliar ground he may serve the student all the better by giving him a real example of chasing down a question in the library. By all means, then, and notwithstanding all objections, let the professor take upon himself the responsibility of guiding the student in his library work, not only by general directions in the class-room, but by personal contact in the alcoves.

When this responsibility has been fully assumed by the professors, each in his own department, there will be good work enough left for the librarian. It would make this paper too long to speak at length of this work; nor is it necessary, for most of it is that which is common to all libraries. By his constant experience with books, and with the wants of students, he will be able, besides having the general care of the whole library, to coöperate with the professors in the work of library instruction which we have described.

Much assistance might be rendered in this work by the right kind of library manuals. The books which college libraries need now more than any others are manuals which shall do for young readers what can be done by books of the work we have prescribed for the professors. What the student wants is the means of learning about books before he sits down to read them. He wants the outlying facts about the great works and their authors which experience with books has given to scholars, but which he cannot spend time to learn from the works themselves. Nor would there be greater difficulties in making a manual which should contain these facts than in making an ordinary cyclopædia. Indeed much of this work has already been done in the different libraries. What we want now is some good editorial work, collecting and revising what has been done, and filling gaps.

Before closing we wish to add to what has already been given still another important reason why an effort should be made to cultivate the habit of studying special subjects in the library. The prescribed curriculum of study is necessarily limited. A college education is sometimes called a liberal education, and we talk about the thorough course of study prescribed at the best colleges. Thorough, in-

deed, but, oh, how narrow when the whole field is considered! Every professor finds that, do the best he can, the course in his department stops with the mere elements of a liberal education in it. New subjects, and new applications of old subjects, are constantly arising and claiming attention. The world of thought widens, but the four years of college life remain the same. Now, there is no better way

to meet this difficulty than to regard the prescribed course as only a preparation for the systematic investigation of subjects, and then encourage and assist the students in making such investigations. This gives a certain scope to individual tastes, and at the same time holds on, for the most part, to the time-honored course of disciplinary study.

LIBRARY AIDS.

BY SAMUEL S. GREEN, LIBRARIAN OF THE FREE PUBLIC LIBRARY, WORCESTER.

IT is very desirable that a library manual should be prepared and published. None exists. There are materials, however, for a good one in the contents of the five volumes of the "Library Journal" already published, and of the Special Report issued at Washington in 1876, by the Bureau of Education, and entitled "Public Libraries in the United States of America, their history, condition, and management."

I have been requested to call attention to the more important articles and papers in these publications, and, by grouping them under appropriate headings, make their usefulness more apparent than it is at present to the great body of librarians and persons interested in establishing and maintaining libraries.

I proceed without further introduction to do the work assigned to me, premising only that large portions of both publications having interest as history only, or because they describe different kinds of libraries, or give library news, will not be alluded to.

LIBRARY LEGISLATION.

For instruction in regard to the history of this subject, and the teachings of experience respecting the best forms for library laws, mention should first be made of the excellent Report on Library Legislation (L. J., 4: 300) made by Dr. H. A. Homes, and to a paper which he read before making it, — "Legislation for Public Libraries" (L. J., 4: 262). The laws proposed as model legislation are printed in the "Library Journal" (5: 79, 109). Read, also, in

this connection editorial notes on pages 76 and 106 in the same volume. Other articles on this subject, which it is desirable to read, are: "State Legislation in the Matter of Libraries," by W. F. Poole (L. J., 2: 7); "Free Town Libraries," in the Spec. Rep. (p. 445), and "Public Library Government" (L. J., 2: 292). There is a record of a discussion which followed Mr. Poole's paper in the L. J., 2: 20.

FOUNDATION OF LIBRARIES.

Note, especially, the "Organization and Management of Public Libraries," by W. F. Poole (Spec. Rep., p. 476); "How to make Town Libraries successful," by F. B. Perkins (Spec. Rep., p. 419); "A word to Starters of Libraries," by Justin Winsor (L. J., 1: 1); "Some Popular Objections to Public Libraries," by W. F. Poole (L. J., 1: 45); and Rev. A. M. Pendleton's series of useful articles; "How to Start Libraries in Small Towns" (L. J.: 161, 213, 249, 313, 355, 421).

LIBRARY BUILDINGS.

Attention should be called to "Library Buildings," by Justin Winsor (Spec. Rep., 465), and discussions on this subject at the meetings of this association in New York and Boston (L. J., 2: 31; 4: 292).

Examine, also; "Hints for Improved Library Economy drawn from Usages at Princeton," by Frederick Vinton (L. J., 2: 53); "Brown University Library" (L. J., 3: 117); and "Elevator in Worcester Public Library" (L. J., 4: 201). A full consideration of the subject of library

buildings is expected at the present meeting of this association.

VENTILATING, HEATING, AND LIGHTING.

Note "Ventilation of Libraries," by D. F. Lincoln, M.D. (L. J., 4: 254), and "Warming Libraries," by A. M. Pendleton (L. J., 5: 277).

The subjects of ventilating and warming library buildings demand fuller treatment than they have received, and it is pleasant to learn that a paper on the latter subject is to be read at the present meeting of this association by Melvil Dui (Dewey).

Much information regarding the use of the electric light for libraries has appeared in the "Library Journal." I wish to call attention to the following articles, stating only, in advance, that Mr. Richard Garnett, who writes two of them, is keeper of the reading-room in the British Museum, and that the electric light has been in use in this reading-room for a considerable time. Perhaps it would be well to read the articles in the following order:—

The "Electric Light at the British Museum Reading-room" (L. J., 4: 128); "Electric Light" (in the British Museum), in a letter of R. Garnett (L. J., 4: 444); "Electric Light in the British Museum" (L. J., 5: 153); the "Electric Light at the British Museum"; a letter from Richard Garnett (L. J., 5: 171).

Discussion is still going on as to the safety of this light at the British Museum. Mr. W. H. Preece, a gentleman whose special acquirements entitle his opinion to respect, is understood to take an adverse view of the matter. On the other hand, we understand that a distinguished American authority in matters of this kind, Professor John Trowbridge, of Harvard College, states that great advances have been made lately in the direction of rendering the electric light available for illuminating purposes.

Articles treating of the effects of gas in disintegrating leather, will be referred to under the heading Binding.

BIBLIOGRAPHY.

One of the latest and best lists of books of reference needed by the officers of libraries is that contained in Mr. Winsor's paper in "College Libraries as aids to instruction." This

pamphlet was issued by the Bureau of Education as "Circular of Information, No. 1, 1880."

In the Special Report issued in 1876 by the Bureau of Education, we have "Works of Reference for Libraries" by A. R. Spofford (p. 686); "Library Bibliography (containing lists of books of reference and of articles in periodicals concerning libraries)," by A. R. Spofford (p. 733); "Scientific Libraries in the United States," by Professor Theodore Gill (p. 183), an article which mentions the best special bibliographies in the different branches of science, namely, anatomy, chemistry, etc. "Medical Libraries in the United States," by General J. S. Billings (p. 171), in which are scheduled the leading reference works needed in medical bibliographical work.

In Part II. of the Special Report, we have, as Appendix II. to Mr. Cutter's Rules, etc., a list of bibliographical works needed by the cataloguer. Mr. Cutter also states here where fuller lists may be found.

The librarian who consults these lists has to be on the lookout to see that the latest edition of a work is given in them and that supplementary volumes have not been published to works there recorded. For example: a new edition of that very important work Vapereau's "Dictionnaire Universel des Contemporains" has just been completed, and supplementary volumes of Brunet's "Manuel" have been published within a short time.

A sure resource in case of doubt is to read over the lists, under the proper headings, prepared by Mr. Cutter for the department "Bibliography" in the successive numbers of the "Library Journal." The "Library Journal" has other valuable bibliographical matter. We note the following article: "Reference Books in English," by Justin Winsor (1: 147).

The portion of the latest edition of the "Handbook for Readers" with regulations, issued by the Boston Public Library, entitled "Books on Special Subjects; how to find them," contains a valuable list of reference books.

The Chronological Index to Historical Fiction, and the annotated catalogue of books in the Lower Hall of the classes of History, Biography, and Travel, also issued by the Boston Public Library, are of great service in supplying

humble bibliographical needs. Elaborate and valuable bibliographies appear in the Bulletins issued by the library of Harvard College, and it is to be hoped that this library will have money placed at its disposal in sums adequate to enable it to do a large amount of this kind of work. Similar bibliographies have been published in some of the Bulletins of the Boston Public Library. The lists of books issued by the Boston Athenæum, the St. Louis Public School Library, the Young Men's Library in Buffalo, and the Free Public Library in Worcester, and the lists prepared by Mr. W. E. Foster, of Providence, for the State Superintendent of Schools in Rhode Island, are valuable for bibliographical purposes.

Some of the best library catalogues are very useful, *such, namely*, as that of the Boston Athenæum, the Brooklyn Library, and the subject catalogue of the Library of Congress.

Especial mention should be made here of the "American Catalogue," compiled by L. E. Jones, and published by Frederick Leyboldt; and it should be stated distinctly that the libraries of the country are very much indebted to Mr. Leyboldt for carrying through such an undertaking as this valuable but unremunerative work, and for his generous conduct in publishing the "Library Journal," although incurring heavy loss in doing so.

Attention should be called to the fact that "Poole's Index to Periodical Literature" will soon be published, and mention should be made of the useful indexes which we have of the "North American Review" (1815-77), "Christian Examiner" (1824-69), "Bibliotheca Sacra" (Vols. 1 to 30, through the year 1873), "Harper's Monthly" (Vols. 1 to 50; June, 1850, to May, 1875); "Scribner's Magazine" (Vols. 1 to 10, Nov. 1870 to Oct. 1875), the "Atlantic Monthly," both that issued by its publishers (1857-76) and a "Supplementary Index to the 'Atlantic Monthly,'" giving gleanings from the volumes already indexed and indexing subsequent volumes up to the beginning of 1881, issued in Bangor, Maine, by Q. P. Index; to other indexes emanating from the same quarter, namely, "A General Index to the Nation" (July, 1865-Sept., 1880), and "General Index to the International Review" (1874-80);

also to other indexes which are promised by this publisher, such as "Indexes to Lippincott's Magazine" and to "Scribner's Magazine" (Vols. 1-20), and to another index still which is promised by Q. P. Index conditionally upon the receipt of a sufficient number of subscribers, namely, "An Index to Articles on History, Biography, Travel, Philosophy, Literature, and Politics," contained in collections of Essays, etc., to the "New York Daily Tribune Index" (1875-); "Palmer's Index to the Times Newspaper" (January 1, 1863-Sept. 30, 1880, which is still published and is working back as well as forwards), to say nothing of the indexes to foreign English Reviews and the "Revue des Deux Mondes," to the Chronicles of Facts and Events in the successive annual volumes of the "Boston Almanac," the Record of Current Events of "Harper's Magazine," the Week in the "Nation," lists of important events appearing in newspapers at the close or beginning of every year, and "Annals of Our Time, with Supplements," by Joseph Irving (1837-July 22, 1878).

CATALOGUING.

A history of catalogue-making and a criticism of the different kinds of catalogues are contained in the article "Library Catalogues," by C. A. Cutter, in the Special Report (p. 526). Persons interested should study this paper, for it is very important to learn what experience has taught before undertaking to make a catalogue. Part II. of the Special Report is Rules for a printed Dictionary Catalogue, by C. A. Cutter. We have here the first printed rules for making a catalogue on the dictionary plan. The writings of Mr. Cutter on the subject of cataloguing, and the work he has done in preparing catalogues, have shown that he is an authority in this matter second to none.

For expositions of other systems of cataloguing, mixed and classed, see "Catalogues and Cataloguing," by S. B. Noyes, Jacob Schwartz, John J. Bailey (Special Rep., p. 648), and the remarks of Melvil Dewey in "Decimal Classification and Subject Index" (Spec. Rep., p. 623).

Four volumes of the catalogue of the Boston Athenæum (A-S) have been issued, and it is hoped that the work will be completed before

the close of the present year. This is the best example that we have of a printed catalogue prepared on the dictionary plan. It was made by Mr. Charles R. Lowell, but has been carefully revised and greatly improved by Mr. Cutter during its preparation for printing, and although he is unwilling to have it regarded as his ideal catalogue, yet owing to his work it has proved the most valuable contribution yet made anywhere to the list of printed catalogues of large libraries.

Mr. Noyes's catalogue of the Brooklyn Library is now complete. It is constructed on the dictionary plan, with modifications, the most important of which are the introduction in alphabetical order of carefully classed lists of books on the various branches of knowledge and the frequent use of references to periodicals. Mr. Noyes's catalogue is an admirable piece of work and one for which all students are indebted to him.

The Report of the Committee on Uniform Entries, appointed at the meeting of this association in New York, is published in the "Library Journal" (3: 12); and the majority report there given contains the rules for cataloguing that stand as the rules recommended for use by this association until amended by it.

With Mr. Cutter's Rules, this Report, and good catalogues, such as those of the Boston Athenæum and the Mercantile Library of Brooklyn, at hand, libraries are now well equipped for beginning, under guidance, the work of good cataloguing.

We do not realize how great our indebtedness is to the institutions which have incurred the expense of issuing the best printed catalogues. Why do not all librarians buy both of the catalogues just mentioned, for the sake of the advantages to themselves which would result from their free use, and to encourage other institutions to issue similar catalogues? With the rules we now have, and the good examples of catalogues which we may acquire by purchase at what, considering their cost, is a nominal price, the work of cataloguing is half done, and can be entrusted to skilful persons who have had only elementary training in this kind of work with a little supervision on the part of a specially trained cataloguer.

As examples of annotated catalogues we must still refer to the catalogue of the books in the Lower Hall of the Boston Public Library; of the classes of History, Biography, and Travel, the Fiction list of the same library, and to the Catalogue of the Public Library at Quincy, Massachusetts. Excellent papers on Cataloguing are those read at the Boston meeting of this association by Fred. B. Perkins and James L. Whitney, entitled respectively "Classification in Dictionary Catalogues" (L. J., 4: 226), and "Catalogues of Town Libraries" (L. J., 4: 268). See, too, Mr. Garnett on "Public Libraries and their Catalogues," by C. A. Cutter (L. J., 4: 452). It should be noted here with great satisfaction that Congress has enabled Dr. J. S. Billings to issue the first volume (A—Berlinski) of his valuable "Index Catalogue of the Library of the Surgeon-General's Office, United States Army." Reference should be made to the lists of "Additions," issued by several libraries which are mentioned by name under the head of "Bibliography," and to the "Index Medicus," a monthly classified record of the current medical literature of the world, compiled under the supervision of Dr. John S. Billings and Dr. Robert Fletcher.

An inexpensive catalogue is described in the "Library Journal" (1: 436).

There is much interesting matter about indexing in the "Special Report" and in the "Library Journal," particularly in the latter. Thus we have "The Plan of the New Poole's Index, A Library Symposium," by S. B. Noyes, Justin Winsor, F. B. Perkins, J. L. Whitney, J. Schwartz, W. I. Fletcher, C. A. Cutter (L. J., 3: 141); "The Index Symposium and its Moral," by W. F. Poole (L. J., 3: 178); "Some Points in Indexing," by W. I. Fletcher (L. J., 4: 243), and "Book Indexes," by F. B. Perkins (Spec. Rep., p. 727).

Added to the Report of the Committee on Uniform Title Entries are a general list of abbreviations and what are known as Cutter's "Abbreviations of Christian Names" (L. J., 3: 16). Note also "Months in Brief Entries," by Mr. Dewey (L. J., 4: 93), and "Abbreviations for Feminine Names," by C. A. Cutter (L. J., 5: 176). Appended to the report above-mentioned on Uniform Title Entries is a

"Subreport on Sizes" (L. J., 3: 19), which contains the results of much thought on the part of our best cataloguers. There is much more on this matter in the "Library Journal," which may be found by the use of the indexes of that periodical. Mr. Cutter treats the use of capitals in the "Library Journal" (1: 162); Mr. Whitney's "Pseudonyms and Anonyms," in different numbers of the "L. J." must not be overlooked. They are valuable.

For a description of the different kinds of catalogues in use in public libraries besides the kinds already considered, see Appendix I. to Mr. Cutter's "Rules," etc., in the second part of the "Special Report." A discussion of interest was started by Justin Winsor's "Shelf lists *vs.* Accession Catalogues" (L. J., 3: 247). Articles in which views different from those of Professor Winsor are expressed are "Shelf lists *vs.* Accession Catalogues," by W. F. Poole (L. J., 3: 324), and "The Accessions Catalogue again," by F. B. Perkins and Melvil Dewey (L. J., 3: 336-8).

Note "Brass Guide Boards for Card Catalogues," by C. A. Cutter (L. J., 5: 215).

THE NUMBERING OF BOOKS AND THEIR ARRANGEMENT AND CLASSIFICATION.

Read first two series of general articles by Melvil Dewey, namely, "Principles underlying numbering systems" (L. J., 4: 7, 75) and "Arrangement on the Shelves" (L. J., 4: 117, 191).

There have been two interesting and important discussions of these subjects in the "Library Journal." Both were started by articles written by J. Schwartz, of New York.

In the first discussion the articles succeeded one another in the following order: "A combined System for Numbering and Arranging," by J. Schwartz (L. J., 3: 6); "Another Method of Numbering Books," by C. A. Cutter (3: 248); "Mr. Cutter's Numbering System," by J. Schwartz (3: 302); "Numbering: Rejoinders to Mr. Schwartz," by M. Dewey and C. A. Cutter (3: 339); "Plans for Numbering, with especial reference to Fiction; A Library Symposium," John Edmands, J. N. Larned, M. Dewey, C. A. Cutter, F. B. Perkins (L. J. 4: 38).

The second discussion began with an article

by Mr. Schwartz, entitled "A Mnemonic System of Classification" (L. J., 4: 3), which was followed by "The Schwartz Mnemonic Classification," by M. Dewey, F. B. Perkins, C. A. Cutter (L. J., 4: 92), and "Classification on the Shelves," by C. A. Cutter (L. J., 4: 234).

See, also, "Mr. Cutter defends his Modifications of the Dewey Plan" (L. J., 4: 17), and "Mr. Cutter continues" (L. J., 4: 88).

Other important articles are: "A Proposed Modification of the Amherst Classification in Mathematics, Astronomy, and Physics," by Lord Lindsay (L. J., 4: 149), and "Classification for the Natural Sciences," by C. A. Cutter (L. J., 5: 163). Send to Mr. Cutter to buy the latest printed details of his system. Look at the last report (1880) of the librarian of Harvard College. Consult "Decimal Classification and Subject Index," by M. Dewey, in Special Report (p. 623). See, also, "British Museum Shelf Classification," by R. Garnett (L. J., 2: 194), and "Author Catalogues in Classified Shelf Systems," by C. A. Cutter and Melvil Dewey (L. J., 3: 371).

ADMINISTRATION.

Consult especially reports of the Coöperation Committee of the American Library Association to be found in different numbers of the "Library Journal." This committee, of which Mr. Cutter has been chairman, has made recommendations of the best methods and appliances in library matters, after careful examination of all proposed plans and suggestions. It has reached decisions on such subjects as Accession Catalogue, Shelf Catalogue, Binders, Printed numbers, Call slips, Catalogue slips, Covering paper, Size of Catalogue cards, etc., etc. W. F. Poole's elaborate contribution to the Special Report on the Organization and Management of Public Libraries (p. 476) is of great importance. Refer also to "Proceedings of the Conference of Librarians at Philadelphia, in 1876," and of the meetings of the American Library Association in New York and Boston, as reported in the "Library Journal." Examine, too, Notes and Queries in different numbers of the "Library Journal."

For instruction in regard to the best methods in use for charging books, and for criticism

of various methods, read first an admirable series of articles in the "Library Journal," by Melvil Dewey, entitled, respectively, "Principles underlying Charging Systems" (L. J., 3: 217), "Charging Systems based on accounts with Borrowers" (L. J., 3: 251), "Charging Systems based on Accounts with Books," (L. J., 3: 285), and "Charging Systems: a new combined plan and various details" (L. J., 3: 359). Consult, also, "Systems of charging Loans and an improved Slip-case," by Frederick Jackson (L. J., 3: 230); "The Charging System at Harvard," by Justin Winsor (L. J., 3: 338); "Another Charging Plan," by C. A. Cutter (L. J., 4: 17); "A Combined Charging System," by J. Schwartz (L. J., 4: 275); "Mr. Cutter's Charging System," by C. A. Cutter (L. J., 4: 445); "More about Charging Systems," by C. Estabrook, J. Schwartz, Melvil Dui (L. J., 5: 72), and "New Charging System in use in the Providence Public Library" (L. J., 5: 320).

Mr. W. F. Poole read at the Boston meeting of this association an interesting paper entitled "Spread of Contagious Diseases by Circulating Libraries" (L. J., 4: 258). Mr. W. B. Clarke read at the same meeting a paper on "Book Thieving and Mutilation" (L. J., 4: 249). Examine, also, in this connection, "Conviction for Book-thieving" (4: 377) and "Capture of a notorious Book-thief," by Samuel S. Green (L. J., 5: 48.)

In regard to the disposition to be made of pamphlets, consult "Preservation of Pamphlets," by C. A. Cutter (L. J., 1: 51); "Proceedings of the Conference of Librarians at Philadelphia" (L. J., 1: 101, 104); "Pamphlets" (in an article by A. R. Spofford on the "Binding and Preservation of Books"), Spec. Rep., p. 677, and "Treatment of Pamphlets in Special Libraries," by E. S. Holden (L. J., 5: 166).

For the recommendations of this association in regard to library statistics, see "Report of the Coöperation Committee" (L. J., 1: 429), and the amendments made to the report by the Association at its New York meeting (L. J., 2: 37). Note, also, "Library Statistics," by Samuel S. Green (L. J., 5: 83), and "Library Statistics," by W. E. Forster (L. J., 5: 107).

Other interesting articles and papers in the

"Library Journal" and Special Report, to which attention may properly be called under the heading Administration, are "Branch Libraries" (L. J., 1: 288); "A self-supporting Collection of Duplicate Books in Demand," by F. M. Crunden (4: 10); "Book Selections," by Melvil Dewey (1: 391); "Civil Service Reform in Public Libraries," (5: 113); "Book Auction Catalogues and their Perils," by A. R. Spofford (3: 53); "Alfabeting Catalogue Cards," by Melvil Dewey (Spec. Rep., p. 730, and L. J., 5: 176); "Delinquent Notices and Check-Box," by Melvil Dewey (L. J., 3: 370), and "Duplicating Processes," by Melvil Dewey (L. J., 4: 165). References on many other subjects in which persons having the charge of libraries are interested would have been given here had room allowed. They are the less necessary since the excellent indexes which Mr. Cutter and Mrs. Dui prepare for the "Library Journal" enable inquirers to find readily what it contains concerning any matter of interest. Look there and in the Special Report for such subjects as Indicators; Gum tragacanth as a Library Paste: Embossing Stamps (for the covers of books); the Sunday Use of Libraries, etc., etc.

BINDING.

Consult "Binding and Preservation of Books," by A. R. Spofford (Spec. Rep., p. 673); "Library Memoranda," by Justin Winsor (Spec. Rep., p. 712); "Bindings for a Public Library," by F. P. Hathaway (L. J., 4: 248); "On Binding," by Sir Redmond Barry (2: 203); "Before Rebinding," by Edward G. Allen, of London (L. J., 5: 214); "Buckram Binding," by E. B. Nicholson (L. J., 2: 207); "Buckram" (L. J., 2: 34); and "The use of Buckram, Linoleum and Cretonne for Binding," by E. B. Nicholson in "Proceedings of the United Kingdom Association" (L. J., 5: 304). In the article last referred to Mr. Nicholson, the first man to recommend the use of buckram as a binding, withdraws his recommendation. It should be stated, however, that some librarians still regard buckram as a useful material for binding.

On the restoration of books, see L. J., 2: 24.

For the effects of gas and heat on bindings, see "Gas and Heat" (L. J., 1: 124); "Gas, light, and bindings," by F. B. Perkins (L. J., 3: 64); "The deterioration of Bindings (a let-

ter from Professor Wolcott Gibbs to William W. Greenough, President of the Board of Trustees of the Boston Public Library (L. J., 3: 229); "Gas" (in article on ventilation, by D. F. Lincoln, M.D.) (L. J., 4: 255); "On the Deterioration of Library Bindings," by Prof. W. R. Nichols (L. J., 4: 435); Communication from William Hand Brown, of the Johns Hopkins University, on "Bindings deteriorated without Gas" (L. J., 5: 50); and "Deterioration of Bindings," by H. A. Homes (L. J., 5: 213).

For insect pests in libraries, see an article with this title by Professor H. A. Hagen in the "Library Journal" (4: 251); "The Croton Bug as a Library Pest" (4: 376); and "Library Pests" (4: 448).

LIBRARIES AS EDUCATIONAL INSTITUTIONS.

Examine, for information on this subject, "Public Libraries in Manufacturing Communities," by W. I. Fletcher (Spec. Rep., p. 403); "Public Libraries and the Young," by W. I. Fletcher (Spec. Rep., p. 412); "Personal Relations between Librarians and Readers," by Samuel S. Green (L. J., 1: 74); "The Usefulness of Public Libraries" (as illustrated by the experience of the library at Worcester, Massachusetts) (L. J., 5: 114); "On Library Lectures," by W. E. A. Axon (L. J., 3: 47); "Library Lectures and other Helps," by Justin Winsor (L. J., 3: 120); "Library Questions and Answers," by Justin Winsor (L. J., 3: 159); "Methods of securing the interest of a Community," by W. E. Foster (L. J., 5: 245); "Free Reading-rooms," by William C. Todd (Spec. Rep., p. 460), and "The 28th Annual Report of the Trustees of the Boston Public Library" (1880), p. 18 (to find an account of the work done by Thomas H. Cummings and Mary A. Jenkins while stationed near the catalogue of the Lower Hall to give assistance to inquirers).

For the consideration of the place of libraries in college instruction, and for the treatment of kindred subjects, consult "College Libraries as Aids to Instruction" (Circular of Information, No. 1, 1880, issued by the Bureau of Education), which contains important papers by Prof. Justin Winsor and Prof. O. H. Robinson; "College Library Administration," by O. H. Robinson (Spec. Rep., p. 505); "Pro-

fessorships of Books and Reading," by F. B. Perkins and William Mathews (to teach how to read) (Spec. Rep., p. 230 and p. 240); "Learning to Read in College," by R. R. Bowker (L. J., 2: 60); "Class-room Bibliography" (L. J., 2: 66); "Use of College Libraries," in an extract from a report by Justin Winsor (L. J., 5: 47); "The College Library and the Classes," by J. Winsor (L. J., 3: 5); "Open Shelves at Brown University," by R. A. Guild (L. J., 5: 210); Third Report (1880) of Justin Winsor as Librarian of Harvard University.

Consult for information regarding the connection of schools and libraries, "The Relation of the Public Library to the Public Schools," by Samuel S. Green (L. J., 5: 235); "The Public Library and the Public Schools," by C. F. Adams, Jr. (L. J., 1: 347), and Mr. W. E. Foster's admirable articles — "The School and the Library; their Mutual Relation" (L. J., 4: 319), "The Relation of the Libraries to the School System" (L. J., 5: 99), "How to use the Public Library: Suggestions for the use of pupils" (L. J., 4: 447), and "On Aimless Reading, and its Correction" (L. J., 4: 78). Examine, also, "Reading in the Public Schools," by Robert C. Metcalf (L. J., 4: 343), and "Public Library and Public Schools," by Mellen Chamberlain (L. J., 5: 299).

In regard to the Fiction Question, refer to "Sensational Fiction in Public Libraries," by Samuel S. Green (L. J., 4: 345); portions of a paper entitled "Some Popular Objections to Public Libraries," read at the Philadelphia Conference by W. F. Poole (L. J., 1: 45); "Reading in Popular Libraries," by Justin Winsor (Spec. Rep., p. 431); "Free Libraries and Readers," by Justin Winsor (L. J., 1: 63); "Fiction in Public Libraries and Educational Catalogues," by C. F. Adams, Jr. (L. J., 4: 330); "London Saturday Review," and "London Telegraph" (which contains J. S. Mill's views on Fiction) (L. J., 1: 223), "Fiction in Free Libraries," by P. Cowell of Liverpool (L. J., 2: 152); "Fiction in Libraries; an Extract Symposium (L. J., 3: 196)," "Responsibility of Parents in the selection of reading for the Young," by Kate Gannett Wells (L. J., 4:

325); "Evil of Unlimited Freedom in the Use of Juvenile Fiction," by Miss M. A. Bean (L. J., 4: 341); Addresses of James Freeman Clarke, T. W. Higginson, and others, at the Boston meeting of this Association (L. J., 4: 355, *et seq.*); As to novel reading, "A Confession," by Peccator (L. J., 5: 104), and "Class Adaptation in the selection of Books; the Fiction Question" (a communication of S. S. Green in answer to Peccator), (L. J., 5: 141). For an example of radical opposition to the presence of any novels in a public library, see "Fiction in Public Libraries," by William Kite (L. J., 1: 277). In the Proceedings of the Philadelphia Conference there is a discussion on novels in libraries (L. J., 1: 96). So, also, in the "Proceedings of the London Conference" (L. J., 2: 255).

For a list of the best hundred novels, see an article by F. B. Perkins in the L. J. (1: 166). There is an interesting paper on "Sunday School Libraries," by Miss Martha H. Brooks, in "Library Journal" (4: 338). Attention should be called to the admirable selected lists of books needed in the investigation of various subjects issued by Mr. Foster, of Providence, of which several have been published in the "Library Journal,"¹ and to Mr.

Foster's article "Reference Lists on Special Topics," with specimens of lithogram bulletins (L. J., 5: 38). References to Mr. Foster's lists, and to a list of works in "Political Economy and Political Science," by Professor W. G. Sumner, are given in a note.

NEED OF TRAINED LIBRARIANS.

Examine "Library Science: a Special Study at the (German) Universities," by Rullman (Spec. Rep., p. 24); "Apprenticeship of Librarians," by Melvil Dewey (L. J., 4: 147); and "Consulting Librarianship," by Melvil Dewey (L. J., 5: 16).

CONCLUSION.

In closing, it should be stated that there is much discussion in the Special Report and "Library Journal" concerning improvements, which it is to be hoped will be sometime introduced. Such subjects are treated there as coöperative cataloguing, coöperative indexing of periodicals (as supplementary to the work done by Mr. Poole in his "Index of Periodical Literature," soon to be issued), the supply by publishers of catalogue slips with books sold to libraries and individuals, the distribution of public documents, a clearing-house for duplicates, etc., etc.

It will be noticed by those persons who have listened to this paper that libraries and the community are much indebted to a few of the leading librarians of the country for the time they have given to the gratuitous preparation of articles and papers embodying their experiences and the results of their study respecting most of the important subjects in Library Economy.

Especial thanks are due to the United States Commissioner of Education and his assistants for the preparation and publication of the indispensable Special Report, — Public Libraries.

SAMUEL S. GREEN.

¹ "Political Economy and Political Science," by W. G. Sumner (L. J., 5: 17); "Hawthorne" (L. J., 5: 40); "The Irish Landlord and his Tenant" (L. J., 5: 40); "Reading" (L. J., 5: 41); "Hume" (L. J., 5: 42); "Should Parochial Schools be established in the U. S." (L. J., 5: 80); "Will the publication of Charles Dickens's letters enhance his fame" (L. J., 5: 81); "Should legal-tender notes be withdrawn from circulation" (L. J., 5: 81); "Is a change in English orthography desirable" (L. J., 5: 81); "Herbert Spencer" (L. J., 5: 111); "William Ellery Channing" (L. J., 5: 112); "International Copyright" (L. J., 5: 112); "Gladstone's Political Integrity" (L. J., 5: 113); "U. S. Constitution" (L. J., 5: 172); "U. S. Constitution," continued (L. J., 5: 222); "Founding of Boston" (5: 288); "Henry Wadsworth Longfellow" (5: 290); "Robert Burns" (5: 290); "The Foundation of the American Colonies" (L. J., 5: 329); "The Alienation of the American Colonies" (L. J., 5: 329).

THE PROCEEDINGS.

FIRST SESSION.

(WEDNESDAY MORNING.)

The fourth general meeting of the Association was called to order shortly after 10 A.M., February 9, 1881, in the Library of the Army Medical Museum, at Washington; and the President, Mr. JUSTIN WINSOR, delivered the opening address.

(See p. 63.)

REPORTS.

Mr. SPOFFORD, Chairman of the Reception Committee, welcomed the members to Washington, and announced some changes from the printed programme.

Mr. DUI, Secretary of the Association, reported orally:—

I am to play the roll of Rip Van Winkle this morning, for comparatively little has been done since my report to the Boston meeting. Those really interested in the state of the American Library Association will read vol. 4, p. 282-6, of the *Library journal*, and the recent letter on the "Past, present, and future of the American Library Association," vol. 5, p. 274. I need not repeat. A careful examination shows that I should say exactly the same to-day; and I trust I may say enough to induce those present to read those reports again. I confess to a little discouragement, because the man to do this work for the compensation it will yield cannot be found. Personally, my interest was never greater than in these two years; but it has been utterly impossible for me to command an hour's time, as those of you who know what my work has been in that time well know. Still I have stolen time from sleep to do quite a little of routine work in answering inquiries and similar work. I want to emphasize the Boston report under *Addresses, Publications, Gifts, and Legacies*, and chiefly that no satisfactory work will ever be done till we find the right man to give his time to it and keep open a central office. To agree that a thing is good, needed, practicable, that means can be raised, and all that, is not enough. There must be some one to go on and do it. Each waits for the other, and the other is too busy with his own library and personal cares.

I thought four years ago that our work was like a wheel which, once under powerful motion, would run itself for a long time. But it has proved itself to be like a pump-handle, and it is not in human power to pump so hard that a single stroke will go on by its own momentum. We must have a man working the lever all the time and then we shall do the great things we have planned and are to plan.

Still, something has been done on which I can congratulate the American Library Association. Mr. Poole's report on his great index will show how much we have to be grateful for there. The American Library Association Catalog has advanced towards publication, and I can but believe that a way will soon be provided for its issue. The *Library journal* is to go on in spite of the decision that it must stop, and under that most loyal and self-sacrificing publisher that a society ever had, Mr. F. Leyboldt, and with the editorship of the one man here or abroad that we should vote for first, Mr. C. A. Cutter. This is indeed something to be grateful for, so necessary is the *Journal* for all our work. Finally the American Library Association has been formally incorporated for the excellent reasons given in the last *Journal*, vol. 5, p. 307.

I wish to add to the recommendations of the Boston report that we establish, beside our regular membership, the position of associate and fellow, paying \$5.00 or \$10 per year instead of \$2, and that any member, associate or fellow, paying for ten years in advance becomes a life member, associate or fellow, free from all further assessments. I believe that we could secure quite a number of names for the new grades of membership, at once adding to our revenues for a much needed work, and increasing the interest of those who joined.

The report was adopted, and referred to the Executive Board for action on its recommendations. The report of the Finance Committee, S: S. GREEN, Chairman, was deferred.

(See 2d session, p. 127.)

COÖPERATION.—INDEXING OBITUARIES.

Mr. CUTTER, Chairman of the Coöperation Committee, reported orally:—

Mr. Frederic Beecher Perkins resigned from the committee when he went to San Francisco, and was replaced by Mr. Samuel H. Scudder, of Harvard College Library. No meeting of the committee has been held since the Boston Conference. Yet one coöperative work has been begun which may grow to important proportions. Having been asked by Mr. H. B. Wheatley, Secretary of the Index Society, to procure notes of American obituaries to be published in the annual reports of the Index Society, as references to English obituaries for 1878, contained in periodicals, were published in their first report in 1879, I made application for assistance to the busiest men I knew, experience having taught me that this class are always most ready to take on new work. The result justified my course. All promised assistance, with the exception of four, who had probably already undertaken so much that no further load was possible. There is still, however, room for more coöperators and I should be glad to receive the names of persons willing to assist. The work will not be hard. It is simply to look over the current files of two or three newspapers and note on slips of paper the more important obituaries. To be worth referring to, they should be of some length; they should be presumably original, and not clipped wholesale from biographical dictionaries; they should be of Americans in general, though there do appear from time to time original notices of eminent Europeans, especially of scientific men, written by able men, and well worth a reference. We desire especially notices of artists, literary and scientific men, inventors, statesmen, but not ward politicians; business men who have made a success by *new* methods; but not the mere millionaire, who, by simply following sagaciously the old track, or by some lucky speculation, has made a fortune, unless that lucky hit is itself so peculiar that the man becomes famous thereby. In short, we want all who by any means deserve or are likely to find a place in the history of literature, the arts (fine and useful), the sciences, or the world.

The form in which reference should be made can be seen in either of the two annual reports of the Index Society, but for those who have not yet subscribed to that valuable series I will read a few specimens:

Appleton (Dr. Ch. Edward Cutts Birchall), editor of the *Academy*, b. at Reading, Mar. 16, 1841, d. at Luxor,

Upper Egypt, Feb. 1. *Ath.* 1879, i. p. 249; *Acad.* 1879, i. p. 162; *Law Times*, lxxvi. p. 303; *Times*, Feb. 17, p. 104; *Nature*, xix. pp. 374, 386; *Trübner's Record*, xii. p. 47.

Huber (Prof. Johannes), author, and a leader of the Old German Catholic movement, b. at Munich, Aug. 18, 1830, d. there Mar. 20. *Times*, March 22, p. 7d; *Ath.* 1879, i. p. 408; *Acad.* 1879, i. pp. 284, 302.

O'Shaughnessy (Mrs. Arthur), daughter of Westland Marston, joint author with her husband of "Joy Land," d. at Notting Hill, Feb. 8. *Ath.* 1879, i. p. 218.

The names of those who are now doing this work are:

G: F. Arnold, *Boston d. Advertiser*.

F. M. Crunden, *St. Louis Republican*, *Globe-Democrat*.

C: A. Cutter, *National Association of Wool Manufacturers*, *Proc. Numismatic and Antiquarian Society of Philadelphia*, and odds and ends.

J: Edmands, *The North American*, *The Press*.

W: E. Foster, *Providence Journal*.

S: S. Green, *Worcester Spy*, *Worcester ev'g Gazette*, *Christian Register*.

E. W. Hall, *Portland d. Press*, *Portland Transcript*, *Examiner and Chronicle* (N. Y.), *Watchman* (Boston).

F. H. Hild, Chicago papers.

Miss C. M. Hewins, *Hartford Courant*, *Hartford Times*.

Miss H. P. James, *Montreal Gazette*, *New Orleans Picayune*.

J. N. Larned, *Albany Journal*.

W: M. L. Lee, *Baltimore American*, *Sun-Gazette*.

S. B. Noyes, *N.Y. Herald*, annual volume of the *American Encyclopædia*.

Herman Kent Phinney, *Rochester, N. Y. World*.

R. B. Pool, *N.Y. Times*, *N.Y. Tribune*.

W: Rice, *Springfield Republican*.

T. P. W. Rogers, Vermont papers.

J. Schwartz, American monthly magazines, except *Harper's*.

S: H. Scudder, American scientific journals and transactions of scientific societies.

[Since this report was made Miss M: E. Sargent, of Lowell, has undertaken *Harper's Monthly*, *Harper's Weekly*, and the *Scientific American*, and Miss Lucy Stevens has promised assistance.]

SUBJECT HEADINGS.

Mr. CUTTER, Chairman of the Committee on an Index to Subject Headings, reported orally:—One of the chief difficulties of cataloging is to make choice among the synonymous names of subjects. Who has not been perplexed by doubt which to use of such names as Birds and Ornithology, Insects and Entomology, Animals and Zoology, Fish and Ichthyology, Life and Biology, and whether to take the common or the scientific names of particular animals and plants, Spiders or Arachnidæ, Butterflies or Lepidoptera, and so forth? Then there are antonyms. Is one to say Temperance or Intemperance, Free Trade or Protection, or to use both headings; and if both, on what principle is one to divide the titles between them,—by the use of the one word or the other in the title, separating similar works by the accident of a name, or by the tendencies of the works, putting them under the name of that doctrine which they advocate? Then there is the case of the semi-synonyms,—two subjects partly overlapping, so that one does not know whether to use the first with a reference from the second, or the second with a reference from the first, or both with reference both ways; the result being that each question is decided with more or less trouble by different catalogers differently, and sometimes by the same cataloger in varying ways at various times. It was thought that something might be done to put an end to all this doubt and diversity, if a committee should compile and publish an alphabetical list of subject-headings, as complete as possible, with some indication which was to be preferred, and a sketch of the principles upon which choice should be made. Under the direction of Mr. Bowker, on whose motion the committee had been appointed, a list was made on cards of all the headings in the catalog of the Boston Athenæum, with the intention of completing the list by a collation with the catalogs of the Boston Public Library, the Brooklyn Library, the Library of Congress, and perhaps with a Dictionary. But before this could be done Mr. Bowker went to Europe, Mr. Perkins went to California, Mr. Noyes and I were fully engaged in hurrying through the press the last volume of our catalogs, and Mr. Fletcher was overwhelmed, as he still is, in preparing Mr. Poole's Index for the press. The work came to a stand-still. Whether it will ever be

resumed is very doubtful. One member of the committee, at least, is opposed to it, as you may see in the following extract from a letter which I lately received from Mr. FLETCHER:—

"I am satisfied that it is impracticable for the Library Association to prepare and print for the use of librarians a guide list of subject-headings such as is wanted, and as Mr. Bowker made a beginning on. To be of any service the list must needs be full, for its chief value would reside in its least common and familiar portions. And it must always be a disappointing resort for the cataloguer, as he is most likely to refer to it for headings of new subjects, such as the growth of literature is constantly introducing, only to find that they were not known when the list was made. The large amount of labor required to make the list, the expense of printing it, and the very small sale it could obtain, appear to me insuperable obstacles to its preparation and printing.

"But something can be done to promote uniformity of practice among libraries in the matter of choice between subject-headings, nearly or quite synonymous, as well as in the matter of choice between *forms* of such headings. I have before me your 'Rules,' and I observe that in the pages (37-49) devoted to this matter, you raise many of these questions as to choice, to which no answer seems possible save a conventional one.

"When talking with you in the summer on this subject, I thought we might, as a committee, prepare and submit to the Association some new rules for the making of subject-headings, tending to settle some of these questions. Time has been wanting in which I could consider the matter sufficiently to suggest such new rules, and I have also come to entertain a doubt whether it is a function of this committee to propose rules, and also whether new rules are what is wanted.

"It seems to me, that with so good a code of rules as we have in your pamphlet to begin with, the chief desideratum now is the establishment of some tribunal of reference for vexed questions in this department. Of course librarians of experience and self-reliance will make their own catalogues in their own way, and take pride rather in the *peculiar* excellences of their work than in its conformity to never so good a standard. But to those who are inexperienced, and who wish

only to make a good working catalogue according to the dictionary system, it would be an advantage to be able to refer puzzling questions to an authority. If I were to be asked for a more definite outcome of what I have written, I can only say that nothing better occurs to me, that seems practicable, than that the *Library journal* should have on its corps of editors one whose business it should be to answer, through the column of Notes and Queries, such questions as may come in, in this department, his decisions being accepted as final (even when not wholly agreed to) by those who wish for uniformity. Here I suppose I touch the one difficulty in the whole matter, namely, *we can't agree!*"

In regard to Mr. Fletcher's proposal of entrusting the decision in these matters to the *Library journal*, let me say that I should welcome gladly an assistant editor charged with this duty.

Mr. SMITH. — In arranging a card catalogue made on the dictionary system, it is sometimes desirable to put cards having two or more catch-words together, and that without taking the trouble to alter the latter. I have instanced the words *Maps, Charts, Plans, and Atlases*, which might be brought together as if the catchword was in every instance *Maps*. Then the maps and atlases of the World could be put first, followed by those of Africa, America, Asia, Atlantic Ocean, Australia, and Europe, each with alphabetical divisions and subdivisions noted on a running title. Under this arrangement, in looking for a sketch of the Battle of Bunker Hill, you would turn to America, then to U. States, then in its alphabetical order to Massachusetts, then to Boston, and finally to Bunker Hill, — all these words occurring in succession in the running title.

The PRESIDENT spoke of the Harvard College Library catalogue.

Dr. HOMES. — There is a difficulty in setting forth a fixed, unchanging index for subject-headings; because with the progress of knowledge there is a continual differentiation towards new subjects. Matters which at first would be embraced under some more general head finally demand more indexing, like Evolution, Pre-historic archæology, Electric light, Telephone, etc.

Mr. KLOPFER, of the Attorney General's office. — Are law headings to be introduced?

Mr. CUTTER. — Yes, special subject-headings of every description are included in the plan.

SHELF CLASSIFICATION.

Mr. CUTTER read his paper on Shelf classification.

(See p. 64.)

Mr. SMITH. — The advantages of a movable, or what I should prefer to call a relative location, were shown on the occasion of moving about 50,000 books from the old Phila. Library in 5th street to the new building in Locust street. No alterations of shelf-marks, shelf-lists, accessions catalogues, or card catalogues, were necessary; the work of moving was accomplished without difficulty; the library was only closed three days, and was then reopened in full working order. The printed catalogue of 1742 is good to-day. I hope that a unanimous vote will be given in favor of the relative as opposed to the fixed location of books on the shelves.

Prof. ROBINSON. — In classification, a practical difficulty arises in case of books on different subjects by the same author, what are called the "Collective Works" of an author, in uniform binding, with volumes numbered throughout as one set. Where such sets are divisible without dividing volumes, as Hallam's Middle Ages, and his History of Literature, I have been accustomed to split up the sets and distribute the volumes about the library according to their several subjects. I classify by subject, and not by binding. I would like to hear what others do.

Mrs. DALL. — If such methods become universal, would it not be necessary for the association to issue a circular advising booksellers to cease binding an author's works on different subjects in volumes numbered continuously?

Mr. CUTTER. — In my scheme of classification I have a place for collected "Works," such as Mrs. Dall alludes to, but there is nothing in the scheme to prevent separating them, and putting, for example, Irving's "New York" in Literature, his "Astoria" in Geography, his "Goldsmith" in Biography, his "Mahomet and his Successors" in History, altho they are vols. 1, 8, 11, 12, and 13 of an edition of his "Works." We have the same difficulty with works in "series" and "libraries." My uniform practice has been to arrange the separate volumes of such sets according to their subjects

whenever they had merely a collective title, and not a continuous numbering. Of course no librarian pays any attention whatever to mere uniform binding.

Some discussion followed, in which all agreed that binding and titles should be disregarded, and some even urged separation by subjects in spite of consecutive numbering.

Prof. ROBINSON. — Will the President be kind enough to state to what extent the professional classification has been adopted at Harvard College, — does it extend to the whole library?

The PRESIDENT. — The entire library is now being classified on the basis of the division of the instruction into departments, as far as practicable.

Mr. GREEN suggested that all who spoke should write out their remarks for the proceedings, as no reporter had been employed.

Mr. CUTTER (in reply to a question of Prof. Robinson). — The idea of the movable system is not my invention. It was in use by others long before I dreamed that anything so convenient was possible.

Mr. VINTON. — My friend, Mr. Cutter, is far too modest to claim anything not his own. He would not disclaim the merit of a useful expedient certainly his, because something like it had been done before. In the similar circumstances into which our identity of employment as librarians must continually bring us, undoubtedly we fall upon the same contrivances, and recognize in the work of others expedients we have adopted ourselves. But, no matter whence the scattered elements came, by the combination of which complicated modern conveniences are made up, the true patentee, if not the genuine inventor, is he who first unites the specific adaptations into one general purpose and result. Mr. Cutter, therefore, is entitled to the credit of having carried farther than any of us a mode of numbering books of which we all see the advantage.

Mr. WINSOR. — I object to the appropriation of the term "relative" to the movable system of noting shelf classifications. I contend that, in fact, the relation of classes one to another is, in the movable plan, liable to inconvenient displacements, particularly in a stack construction, by pushing the classifications round corners and breaking them between different ends of rows, so that continuity of reference is sometimes

disturbed. In the "relative or fixed" system, on the contrary, particularly if the stack construction obtains, as should be the case in all large libraries, the ease of reference is much increased when the ranges opposite each other along an alley bear similar relations to each other by reason of confronting books, class to class, in their natural bearings. The increase of the library causing an extension of the stack, to be sure, may bring the classifications contiguous in part, by the fore-edge, instead of by the face-edge, of the books; but this increase comes with the advance in knowledge, so that books of the same era still in large part front one another. I have not been convinced that the fixed system should, in large libraries, be superseded by the movable system. The advantages of the latter system are, in great part, preserved to the other by the stack method of construction, and an absolute proximity is of the first importance to consulters at the shelf. Supplemented by the use of "flying numbers" for sets homogeneous in character, and growing rapidly, so that their position can be changed as desired, the old fixed location is as flexible as there is any need of, and more determinate in fixing convenient local relations than the other. Either system, however, in the hands of an expert of alert perceptions, can be made to work satisfactorily, and every one had best cling to that which suits his methods.

Mr. DIX. — Mr. Winsor has assumed that in the movable location our periodicals on chemistry would be where he puts his in the fixt, *i.e.*, in the range on the opposite side of the passage. Then in moving on, as he says, the two classes would become separated. In fact, we should put them side by side, and no possible changes or movings could separate them. In his plan (the best of the fixt, no doubt) the best he claims is to go thru tier after tier, finding the same subject in the same range of each, or his subjects would be sandwiched together regularly, each tier having the same subjects in the same order as if in the card catalog chemistry had the front of each drawer, and to get all the books we needed to open all the drawers. In the movable location we do exactly as we do in the card catalog, and secure the absolute perfection of keeping books on the same subject together.

If any one thinks he can keep books together

satisfactorily on the first plan, let him make a diagram of a stack and fill it on the scheme proposed, making the additions in the same irregular way in which they have come into the library for twenty years past. I have never seen this done successfully, either in theory or practice.

Mrs. DALL. — It seems to me that for all libraries of moderate size the classification by subjects could not be carried so far *on the shelves*. Nor is it really necessary. A classification in the catalogue must be had with the proper references; but it is quite as important to a student to find everything by one author on *one* shelf, as to find everything on one subject there. My own experience has been chiefly with small libraries, such as those of parishes, Sunday schools, and factory villages, and I found the hopeful point of Mr. Cutter's report in the admission that methods must remain in a measure adapted to localities and uses.

I should like to ask, also, if any one present knows anything of the "color system" as applied to the binding of books in the wonderful library at Melbourne, in Victoria. It was at one time proposed to organize a Social Science alcove in the Boston Public Library, and Mr. Ticknor only relinquished the idea because the space could not be found. Edwin P. Whipple and the late Starr King sustained me in applying for such an alcove, and if it had been obtained the "color system" would have been applied to the shelves. It was so useful in small working libraries, that I wish to know if an account of the method pursued at Melbourne is accessible to the Congress.

Mr. WINSOR explained the practice of the British Museum in the use of colors, and that of the Melbourne Public Library, and announced the death of Sir Redmond Barry.

Mrs. DALL. — The "color system" was devised not by Sir Redmond Barry, but by the present librarian, Marcus Clarke, and his predecessor, Mr. Tuck; Mr. Clarke being well known in America as the author of a very remarkable novel, based on the "ticket of leave" abuses, and entitled "His natural life."

Mr. GREEN. — The methods regarding binding in use in the Melbourne Library are described in a paper read by the late Sir Redmond Barry at the International Conference

of Librarians in London, October, 1877. This paper was printed in a volume containing the papers, proceedings, etc., of the conference, printed at the Chiswick Press, and in Vol. 2 of the *Library journal*.

Mr. VINTON. — Would this system allow new subjects to be inserted as they come, for come up they will till the crack of doom?

Mr. DUI. — The advocates of the relative system are willing to "toe the crack." A new subject can be added as easily as a new book on an old subject. It can be added as easily as a man can join a procession. Any number of men can join with perfect ease. But the old system is like the berths in a sleeping-car, which admit only a fixed number, however important it may be to put in more.

Prof. ROBINSON. — It would appear that the old method of arranging and numbering books by alcove and shelf, what is called the fixed arrangement, is entirely passing away, and that wherever new libraries are organized, or changes made in old ones, some movable system is adopted. I should like to inquire if this is the case. The change is doubtless a good one; is it universally adopted?

Mr. H: J. CARR. — My opportunities for observation have been different, possibly, from that of any one present, and might, therefore, warrant an assertion in answer to the query of Prof. Robinson; for while not specifically connected with any library, yet circumstances have been such that in the past three or four years I have visited some forty or more different libraries; and with more or less care examined their methods and operations. As a result of such observation I believe that in all the region westward of the Hudson river, the relative (or movable) method of book location is gaining ground, and given preference by the newer libraries, and also in others whose circumstances called for change or removal. But in the New England section, the reverse case seem to prevail, and adherence to the old methods is noticeable.

Speaking of New England, too, suggests in my mind, as to the points urged by Mrs. Dall on the use of various colored bindings, that the great persistence in covering all books in the majority of the libraries of that section is somewhat of an obstacle to the general adoption of the color method.

In this connection we must not forget that no

one system of shelf classification and book location can well fit all libraries; for, just as people living in the tropics need to be clothed differently from those in high northern latitudes, so libraries, in dissimilar situations, and especially if planned for varying purposes, may, for those reasons among others, require like variations in classificatory methods.

Mr. MASSEY. — I adopted the Dui system soon after the classification was published and find the relative location excellent. I had an opportunity last spring to test one of its merits. We enlarged our library and moved all of our books, some 15,000 volumes, into new quarters. The transfer was effected in one day by six laborers, hired from the street, four of whom could not read. Yet the books were ready for circulation the next morning, and the attendants had no trouble in finding their location.

Mr. LARNED. — In the library which I represent (the Young Men's of Buffalo), the Dui system of classification and shelf arrangement, with slight modifications, was adopted about three years ago. It has worked perfectly to the satisfaction of every one concerned. Last summer an enlargement and readjustment took place, which involved the removing of every volume, 40,000 in number. This was done without any interruption of the regular work of the library. Nor was any appreciable trouble experienced by the assistants in finding the books in their new places. The relative location of classes, and of books in the classes, helped by the mnemonic features of the system, guides a searcher so easily and quickly that he could scarcely save time by knowing beforehand where to go.

In the shelf classification of books I have not hesitated to break up collections and series of every description, where the volumes were at all independent in subject. Even when the contents of the several volumes were considerably miscellaneous, if one subject or one literary form prevailed in each, I permit that to determine the place of the volume. In the alphabetical catalogue such collections are reunited under the appropriate common entry; but I see no reason whatever for keeping them together on the shelves.

I have introduced the classified catalogue on cards, with an index of subjects which Mr. Dui proposed in connection with his scheme. This, supplemented by an alphabetical cata-

logue of authors and titles, appears to me to be more serviceable to the majority of people who resort to a library catalogue than any which can be made on the dictionary plan.

Mr. R. B. POOL. — I think there are many libraries which have the "fixed" system, from necessity rather than choice. They are waiting to adopt the "movable" or "relative" system, when they shall make some extensive changes, or remodel the library. This is the case with the library I represent. We expect to want it, and hope the "movable" system will be adopted. For one I am dissatisfied with our present system of attaching a book to a particular case and shelf. It often happens that when we want to locate a new book others must be removed to make place for it, and the labor of changing the shelf-marks, etc., is almost as great as cataloging the books anew.

The writer of the paper might have emphasized more forcibly the effect of classification on the librarian. The constituents of our library frequently ask me what we have on a certain subject? When the books on a given subject are all together, the librarian's memory is greatly aided, he can more readily recall what he has than when he has no definite and special arrangement.

I have given some attention to Mr. Cutter's scheme of arranging books on the shelves, and have been much attracted by it. What the card system is to the catalog this system is to the arrangement of books on the shelves; by it we can intercalate any book on the shelf in its alphabetical place.

Mr. EDMANDS (being asked by Mr. Tyler to explain the working of his system of classification). — In the Mercantile Library of Philadelphia, having now about 140,000 volumes, the books have been lately rearranged and renumbered on a new plan, devised by me more than three years ago. I first divided the books into 22 main classes, which are designated by capital letters A, B, C. Each of these main classes is then divided again into as many sub-classes as convenient or desirable; and each sub-class is designated by a lower case letter, b, d, g. Thus I have about 200 sub-classes, and each one designated by only two characters, Ac, Dh, Ra.

In the department of Biography the books are arranged according to the *subject* of the Life, and not by the *author*, — this brings all

the lives of persons together. In all the other classes and sub-classes the books are arranged on the shelves in alphabetical order by the names of the *authors*. Each sub-class is numbered independently on a scheme which I devised, assigning 10,000 numbers to each sub-class. I assign a specific number to each *book*, and not to each *author*, as is done in some libraries. With this scheme of numbering I provide for an indefinite amount of intercalation without disturbing the strict alphabetical order of the books on the shelves. This scheme of numbering provides for designating more than 2,000,000 separate works with the use of only six characters, and having only the number of sub-classes which I use. If a greater number of sub-classes are made—and more than 600 may be employed—it provides for numbering more than 6,000,000 separate works with only six characters.

It did not seem to me advisable to make a much larger number of classes than I have made. In some of the schemes which have been printed it has seemed to me that the subdivision of classes was carried altogether beyond the point of possible utility. The work of the Librarian in this regard, it should be remembered, is not to classify *knowledge*, but *books*, and books as they are made. And sub-classes should not be made so narrow as not to contain the most of what the library contains on the specified subject. The Amherst plan, in its class of philosophy, affords an example of this excessive subdivision. "Susceptibility" is one of its sub-classes. But it will be found that the most of what the library contains on that subject is in works of a more comprehensive character. And so in other parts of this, and in other places, the classification cannot be carried out fully without tearing books apart and putting some pages in one place and some in another.

As thus classified and arranged our books constitute their own catalogue, and any book can be readily found by its designated place in the system, without waiting to ascertain its number.

Mr. CUTTER (in reply to a question as to the applicability of his system to small libraries).—I have often heard it said that my system of classification, with its 35 classes, each divided into 35 divisions, and many of those into 35 subdivisions, may do well enough for a British

Museum, but is too minute and too complicated for a small library. This is an entire mistake. For all this subdivision is not arbitrary, but permissive. The scheme says to the librarian, "You may want to divide into these minute classes, and if you do, you'd better arrange them in this order and number them with such and such letters and figures. But if your library is a small one, and always likely to remain small, it will save you trouble not to divide some classes. You may even prefer to take only the six first great divisions of the scheme, or you may use all the 35 classes; and so far you will be able to denote each by a single character. Biography, for instance, you may think it best to keep in one alphabetical order; and Botany, and Zoölogy, and so on. But History you will perhaps think it worth while to subdivide by the countries, and put all the English History together, and all the French, and so on. In doing that you will enter upon the second row of letters, and so in any other class which you think it worth while to subdivide. The History of England you may possibly have enough books upon to make it worth while to throw it into periods. Then you enter upon the third row of letters in that class, while in other classes you still use two, or only one." The system, you see, is perfectly elastic. It can be adapted to any kind of a library, small or large, general or special, equally full in all classes, or weak in some and disproportionately rich in others. And if a library receives a sudden accession in some one department, which makes its shallow classification there unsatisfactory, that one department can be rearranged with more minute subdivision, and re-marked without disturbing any of the rest. The object of making the scheme so full is merely to suit it to all libraries, the larger ones using the whole, the smaller ones simply shutting their eyes to all which they have no need to use.

Thus, in arranging the Winchester Town Library of only 4,600 volumes, I went, in many classes, only as far as the second letter, when in my own library, of 125,000 volumes, I should go to the third. I must say, however, that even for small libraries I believe in quite thorough classing. It may take a little more time to the maker, but it saves time to the user, if it is well and practically done. Mr. Edmands, in criticising Mr. Dui's Amherst Classification,

selected his example from Philosophy, a subject which it is very difficult and not very useful to subdivide. The concrete subjects, on the other hand, will bear and will repay division. The historical, geographical, industrial, scientific classes can easily be broken up into parts which have well-known names; and it is not worth while to postpone their thorough classification till the library grows large, because one does not avoid any difficulty by putting off the work, and one incurs the certain trouble at some future time of rearranging and re-marking.

Mr. TYLER. — We moved our circulating department of 30,000 volumes, in less than six days, and with only one horse. We were nearly in the predicament of the famous Irish jail, from which more prisoners escaped than remained within its walls. It finally got into so dilapidated a condition that the county commissioners passed the following minute: "Resolved, *First*, That we will have a new jail. *Second*, That we will occupy the old jail until the new jail is completed. *Third*, That we will construct the new jail out of the materials of the old one." By the aid of a few shelves against the wall at one end of the new book-room, and a judicious use of tables and the floor, we so conducted the removal of both shelving and books that not a hitch occurred, and, had it been required, we could have given out books within half an hour after the last load of books left the old library.

Mr. WINSOR. — The Berlin Library of 800,000 volumes was moved in 24 hours by a regiment of soldiers, who marched in files and carried the books shelf by shelf to the new building.

Mr. LINDERFELT. — In the Milwaukee Public Library, which I represent, it became necessary, about a year ago, to rearrange and classify the whole library, all available numbers in the old system being then nearly, and now entirely, filled up. After comparing the different systems of classification in use among the libraries of this country, it was decided to send the deputy librarian to Buffalo, in order to inquire into the practical workings of the Dui classification, as carried out by the Young Men's Association Library of that place. On her return, the deputy librarian made so favorable report of her observations, that the Trustees decided forthwith to commence the arrangement of our library on the same plan.

The necessity of making a card catalog at the same time, however, has caused the work to proceed but slowly, and it will probably require another year before it is finished. When completed we shall have a library arranged entirely according to the system of Mr. Dui, with but few and unimportant modifications. I am, of course, not prepared to say now what our experience will be in regard to its practical workings in the daily library routine, but I am satisfied that a movable or relative classification is the only one that should be used by libraries for popular use, like ours, and, as far as I can judge from theoretical excellence, Mr. Dui's system is the best one we could possibly have selected, and I should be very much disappointed if a practical test of the system does not confirm this opinion.

As regards the prevalence in new libraries of the relative classification, I labored under the impression that this was the one exclusively used; but on my way to Washington, I called at the Detroit Public Library and found that its books have been numbered within a year, on the absolute plan; one number being given to the alcove, one to the division, a third to the shelf, and a fourth or more to the book, all these numbers being written together without the use of periods, or other diacritical marks.

While I have the floor, I should like to ask Mr. Edmands whether, when, in the course of time, one of his classes grows to be so large as to render a subdivision necessary, such an operation does not involve a renumbering of the whole class, as well as of the newly formed subdivisions.

Mr. EDMANDS. — One of the valuable features of my plan is the facility and economy with which additional classes can be made. This follows from the peculiar method of numbering which I use. I assign 10,000 numbers to each sub-class, and distribute the books in that sub-class, whether they be few or many, over the whole range of numbers; so that any one author has the same number in all the sections; e.g., Allen is 145, Clark, 1750, Jones, 4625, Smith, 8310, and Walker, 9455, in any part of the library. The mnemonic value of this feature is very great as an aid to the ready finding of books.

In the case now of subdividing one of the existing classes, the process will be to take out the books that are to form the new class, and

give them a new *class designation*. The numbers will remain the same as before; and the books left in the old class will retain both the numbers and the class designation which they had before.

Our books on the Greek and Latin languages now constitute class Tf. If we desired to separate them into two classes, we should take out those on Latin, and simply change the class designation to Tg; letting the numbers remain as before; or if those on Greek were fewer in number, we might change them to Te, and allow the Latin to remain as before.

This process of subdividing classes, as the library grows in whole or in any department, can be carried to any desired extent, without making any change in the books left in the original classes. And in provision for this subdivision, I have taken the letters for the sub-class designation not continuously, a, b, c, d, but, scatteringly, b, d, g, j, l, n, r, in order that the letters omitted may be usable for new classes. If at any time all these letters are used, or several in continuation, and it is desired to form a sub-class intervening, it can be done by using a third character, *e.g.*, Tfa or Tf*.

Mr. WINSOR explained the decimal fixed system of the Boston Public Library.

Judge CHAMBERLAIN (being called upon by the President to give some account of the classification in the Boston Public Library). — No attempt has been made to preserve anything like a minute classification of books according to subjects. It is true that certain alcoves, or parts of alcoves, are appropriated respectively to certain subjects, and to secure a continuance of the same arrangements, so far as is convenient, each alcove has been divided through its longitudinal centre by shelves which double the capacity and receive the overflow of the original shelves. And though the numeration from the old shelves to the new was not continuous, yet in no case has the original numerical order of books been disturbed by newcomers, with a view of securing contiguity of all books on the same subject. To secure that in the Boston Public Library would cost more than it would come to. As all books are called for and found by the shelf numbers, it makes no practical difference to the reader, and but little to the runners, where the volume is located. This, of course, would be altogether different if the public had access to

the shelves, as in the Boston Athenæum, but in a large public library, where the rights of all comers are equal, it has been found to be impracticable to open the alcoves to anybody. That will be the problem to be solved in the new building. This fact of non-accessibility, of course, simplifies the matter of classification. Our plan works well for us, and I let it alone; and even if its inconveniences were serious we should be obliged to submit to them while we remain where we are.

I am interested in the discussion of this subject, but rather in that speculative way in which one endeavors to forecast his employments in a state of future blessedness! But in all these conferences, from which so much general advantage accrues, we are obliged to keep steadily in view the exigencies and possibilities of our own libraries.

When trustees or librarians who are about to start a library of 5,000 volumes, with an ultimate increase to 25,000, ask to see the plans and working of a library of 200,000 under one roof, I show them all they desire to see, and then advise them to go to Winchester and see Mr. Cutter's model library, one which they may copy in all respects, and safely.

Dr. HOMES. — I rise in behalf of Mrs. Sanders, Librarian of the Library Association of Pawtucket, R.I., to say that she thinks it desirable that more of the plans for the administration of libraries discussed at the conferences should have reference to the small libraries, which are the most numerous, and whose librarians are also most numerous at these conferences.

Mr. SMITH. — Any system of classification on the shelves which, like that of Mr. Dui, admits of indefinite subdivision as the library grows, is to be preferred to an iron-clad system, like that of the British Museum, which has only certain fixed classes. In the latter case many of the classes in time become unwieldy. Take, for example, the class of British politics: if you have a sub-class, composed of the writings of Junius and of the works about Junius, your shelf classification in this department has some value; otherwise very little.

Mr. POOLE. — The movable system of classification, of which we lately hear so much, I used more than thirty years ago in the library of the "Society of Brothers in Unity," in Yale College, and later in the Mercantile Library of

Boston. In 1856, when I rearranged and classified the library of the Boston Athenæum, I used the fixed system, by giving the books a definite position on a certain shelf, and making sufficient provision, as I thought, for accessions, by leaving a considerable portion on each shelf empty. I adopted this plan for reasons outside of my own preference, which I need not specify. It was a mistake, for I soon ascertained I had not accurately estimated the relative proportions of vacant space which the accessions in different departments would require. Some of the alcoves, with their vacant spaces, had a ragged appearance for a long time, and other alcoves were soon filled to overflowing and required to be rearranged. During the thirteen years I had charge of that library I found it necessary to rearrange the department of American History three times and to make new shelf-lists. I have not used the fixed system since. In classifying the Cincinnati Public Library and the Chicago Public Library, I went back to the movable plan. In the Chicago Library I classified the books when we had but 18,000 volumes. We have now 75,000, and our classification is as accurate as it was originally.

I must confess that I have not taken much interest in the elaborate discussions concerning classification which have been going on in the *Library journal*, for I have not felt the need of more light on that subject. I have a system of classification of my own which answers all my purposes. I have never written it out further than giving a brief outline of it in my paper on the "Organization and Management of Public Libraries," in the Bureau of Education's "Report on Public Libraries," 1876. I must further confess that I have never fully informed myself as to the details of my friend Dui's system of classification. I have an impression that it is a good system, and that he reaches by a different method many excellent results which I attain by my unwritten code. At all events he avoids the inevitable embarrassments arising from giving the books a fixed location. If I were younger than I am I should probably be deeply interested in those discussions about classification, shelf-marks, and book-tags; but as it is, I find it more profitable to do other work, and follow other lines of investigation.

If the library of the future is to be a Harvard "book-stack," six or eight stories high, with

the book-cases two feet four inches apart, not warmed in winter, and from whose prison-cells readers are to be excluded, the question arises whether such a minute classification of the books upon the shelves, as we have been making, is necessary. This accurate classification, in any event, will be made in the catalogue, and the book can be found by its catalogue number, or shelf-mark, and dumped into the presence of the applicant on Mr. Winsor's proposed automatic revolving belt. My preference, however, at present, is not running in the direction of "book-stacks." I still hold to a minute classification of the books upon the shelves, and to giving scholarly persons, when it is necessary, the opportunity of access to the shelves, under conditions of ordinary comfort.

METEOROLOGY.

A letter was read from W. B. HAZEN, Chief Signal Officer, inviting suggestions as to indexing meteorological publications.

Prof. CLEVELAND ABBE. — Although the Army Signal Office has a fair proportion of the current works on Meteorology, yet I do not propose to speak of the library as such, but am especially interested in the two following subjects:

1st. We need a complete index to all the accounts of local storms, tornadoes, auroras, phænological and other local phenomena, as recorded in daily and weekly newspapers and special pamphlets, since the earliest settlement of the country, so that a complete record may be available for the study of the geographical and chronological distribution of these phenomena. The office has for some years past compiled voluminous books of extracts and scrap-books; but these, as yet, only very imperfectly represent the extensive territory that we have to deal with. Possibly similar works exist in town and county libraries, where at least we might hope to find files of newspapers, etc.

2d. The office needs a complete index to the literature of the Science of Meteorology, and its relations to other sciences and the arts. Such an index I have for some years been carrying on as a private undertaking, and it has reached about 25,000 titles on cards of uniform size; but there are apparently fifty or an hundred thousand more titles to be secured before the work will be approximately complete for the literature of the current century, and

the work is probably too large for the resources of a single individual.

The Chief Signal Officer would welcome any suggestions or coöperation by this Association having in view the completion of these two cognate works. In reference to the classification of the cards, I adopted a strictly philosophical arrangement, having, in fact, perhaps indulged in a too minute classification and subdivision, so that although I had hoped to combine therewith the decimal notation of Mr. Dui, yet I found that I needed more than the ten available figures, and have resorted to the alphabet of letters; thus, for instance, the memoirs relating to the diurnal variation in the strength of the winds would fall into the division of *e* for winds.

g, theory.

c, diurnal variation.

a, strength.

In this subdivision, known, therefore, as *e*, *g*, *c*, *a*, the separate titles are arranged in a strictly chronological order.

Prof. Abbe's proposition was by vote referred to the Coöperation Committee. Thanks were voted to Admiral Rogers for his invitation to visit the observatory. It was announced that the reception by the President of the United States would be on Wednesday evening instead of Thursday. The meeting then adjourned.

SECOND SESSION.

(THURSDAY MORNING.)

The meeting was called to order at 10.10 by Pres. WINSOR, seventy-five members being present. Letters were read from R. R. BOWKER, of London, and J. W. R. LEE, of Baltimore. Sec. DUI, in behalf of Gov. and Mrs. Claflin, of Massachusetts, extended a cordial invitation to the Association and friends to a reception in the evening, at their Washington residence.

LIBRARY BUILDINGS.

W: F: POOLE read his paper on Library buildings.

(See p. 69.)

Mr. VINTON. — If this plan should be adopted, of having all the books in a library at first upon one floor, would it not be necessary in any great city to double the estimated cost on account of the land occupied by the library

building? Public convenience makes it indispensably necessary to locate the head-quarters of institutions meant to be frequented by the multitude somewhere near the centre of population. In all such localities the price of land is enormous. However undesirable, therefore, is the expenditure of strength in going upstairs for books it seems to me that my able and accomplished friend will be forced to make a compromise between two aspects of this subject, and, instead of waiting till so vast a space is filled, to erect his building at least two stories high even from the outset, thus diminishing by one-half the cost of land. Going upstairs seems intolerable to us all as we grow older; but paying millions for localities will seem intolerable to tax-payers.

Mr. HAINES. — What provision has been made for ventilation?

Mr. TYLER. — I should like to ask Mr. Poole what he thinks of the advisability of slate for shelves. I am informed, by one whom I think competent to express an opinion, that in connection with iron frames slate would make an admirable fire-proof shelving.

Mr. HAINES. — Glass shelves have been suggested.

The PRESIDENT. — I have known glass to be tried and taken out.

Prof. ROBINSON. — We are certainly indebted to Mr. Poole for a very valuable paper. I have listened to it with great interest, and only wish that some of our library buildings were constructed on his plan. The difficulty with many of us is that it is too late. Our buildings are built, and we must use them as they are. If Mr. Poole looks forward to the erection of such a building for his use as he has described he is to be congratulated.

Mr. LARNED. — Has Mr. Poole attempted to apply his principles to the plan of such a building as would be needed, for example, by the Chicago Public Library, and has he any estimate of the cost of such a building, and how much of the building would he build at once?

Mr. EDMANDS. — In the remarks that have been made upon Mr. Poole's paper it seems to me that his purpose in its presentation has been quite generally misunderstood. It appears to be assumed that his object was to present a definite plan for a library building. I do not so understand him. I have not supposed that he thought of this as the plan for

the new building for the Chicago Public Library, nor for the Library of Congress. It seems to me he intended his paper and his sketches as a study on the subject of library construction. He has attempted to show one of the ways in which a library building can be constructed that shall be free from many of the admitted defects of those most in vogue, and that shall be superior to them in the great essentials of such a building.

Mr. MERRILL asked for a description of the Harvard College plan which was given by Pres. WINSOR at the London and Boston meetings.

Mr. G. R. BLISS.—Has extreme cold, as well as heat, a bad influence on books?

The PRESIDENT.—It sometimes stiffens the glue, and causes the bindings to crack if handled when cold; otherwise no harm results.

Mr. SPOFFORD.—If there were no other cause, Mr. President, why we should all be grateful to our veteran colleague from Chicago, whose lucid and interesting paper has been read, than its suggestions for preventing the overheating of books and libraries, that alone would entitle him to a high meed of praise. If you go into the upper galleries of the Library of Congress, on any day of the winter, and take a book from the shelves, the chances are that it will almost burn your hand. It has often occurred to me that if these warped and shriveled and overheated volumes were not inanimate beings—if they could only speak—they would cry out with one voice to their custodians: "Our sufferings are intolerable." In the library I speak of, moreover, there is only the injury resulting from the rising heat to which the books are subjected, since no gas is burned. When to the fearful and almost incandescent heat, that gathers under every ceiling, is added the well-known destructive influence of coal-gas, burned through many hours of each day, the effects upon the books and bindings are simply deplorable.

Now, by the simple and ingenious expedient graphically represented before you by our Chicago colleague, all the deleterious effects of overheating are got rid of. By the mere method of construction, the lofty upper stories are abolished, each floor for the storage and arrangement of books being only fifteen feet high, all the books are within easy reach from the floor, and the upper half of every library-room is devoted, not to the concentration of heat, but to its dis-

persion or ejection, which is effected by windows which supply at once a maximum of light and of ventilation.

It has been suggested that most librarians are unable to avail themselves of this, or of other marked reforms in the methods of library construction, because, unhappily, their libraries are already built. But it is also true (is it not, Mr. President?) that most, if not all, of them have got to be rebuilt. Whether, therefore, if one take the case of an entirely new library building, of the first magnitude,—as in Washington or in Chicago,—or the case of a little, or an ill-contrived, library edifice anywhere, that has outlived its usefulness, we have here most invaluable suggestions to aid us in determining the most expedient method of planning and constructing. I look upon this information and discussion as of the first importance among our labors in this convention; and, whatever might be our conclusion as to the details of the scheme, I hail the special improvement of which I have spoken as one of great practical value.

The PRESIDENT.—The true way to avoid overheating the book-stack is to separate it from the working-rooms. The latter must be heated, because people are sitting still in them; the former need not be heated enough to harm the books, because the attendants, who alone go into it to get the books, are in motion and can be comfortable at a much lower temperature.

Mr. DUI.—Two things seem certain: the lofty halls of the present style of building are inconvenient, and, because of the heat in the upper stories, very injurious to books. To get space enough to spread a great library out on the ground in a one-story building is, practically, impossible for nine out of ten city libraries. My plan is to combine the merits of both by taking a smaller lot, building high and separating the height into several heat-tight compartments by floors; then run quick elevators. The upper floor would be no hotter than the lowest. The separate floors would then have the advantages of Mr. Poole's separate rooms for distinct libraries of science, history, etc., and the only objection—stairs to climb—would be removed by quick elevators. I specify *quick* elevators to avoid the slight waste of time in the common form, which runs slowly.

Mr. MERRILL.—Books and bindings are not necessarily ruined by heat in lofty rooms, as in

the Public Library of Cincinnati. The heat during the day, in the absence of gas, is not greater at 60 feet than at 6 feet from the floor. This result is due to the fact that the steam-pipes are laid under the marble floor.

Mr. SMITH. — Mr. Poole's plan of a fire-proof library is highly original, and deserving of serious consideration by those who have occasion to erect new library buildings. With all the care that can be used in the choice of materials, a room containing books in galleries, one over the other, is in danger from fire, and the bindings suffer in the upper galleries, not only from furnace heat, but in our climate from the heat of the sun as well. The further books are from the ceiling the better for their bindings. I am not, however, prepared to give up the idea of a central reading-room, like that of the British Museum; but the plan of separate rooms for the storage of books, each fire-proof in itself, has the experience of the city of Paris to recommend it, and will probably be found to be best for the library of the future.

Mr. POOLE. — Mr. Edmands has correctly stated the purpose of my paper. It is a study in library construction, and not a plan for any special library, unless it be one which comes within the precise conditions I have named, — “a reference library of a million volumes.” I might, applying the same principles, have worked out the details, and placed before you the plan for a smaller library. Then the question would have been asked, “How do these principles apply to the construction of the largest libraries which will be needed in this country?” I have preferred to meet this latter inquiry first. At some future time, if it be necessary, I may show their application to smaller libraries. This, however, I hope the members of the Association will do for themselves. I have pointed out the special faults in the popular style of library architecture, and have suggested how they may be avoided. The principles which I have discussed require a specific adaptation to each individual library, for the conditions of no two libraries, as to size, growth, means, objects, and readers, are precisely alike.

Mr. GRISWOLD. — I think Mr. Poole's plan very admirable and unobjectionable, except as regards expense, the chief cause of which would be the large amount of ground neces-

sary. This could be avoided, without sacrificing the essentials of the plan, by making (as in the new library of the University of Berlin) each apartment a narrow rectangle, lighted only from a court, instead of square, lighted on two sides.

Mr. R. B. POOL. — Books in our library on the first floor have been affected by the heat or gas. This is shown from the fact, that while the backs are dried and ready to break, the sides are fresh and unaffected. I refer to full russia binding.

The PRESIDENT. — This is common to russia, which is largely abandoned as a binding. In order of merit the binding materials rank thus: morocco, good sheep (not skiver, which is split sheep), russia, and calf.

Mr. UHLER. — The old calf bindings in the library of the Peabody Institute are comminuting and throwing off fine particles, like dust, from the surface of the leather, and particularly from the joints of the backs, causing the binding to crack and break away. On our copy of Grævius and of Gronovius, the leather is rapidly rubbing off. Morocco leather, especially the red, has proved to be the best for constant wear in the experience of this library.

The PRESIDENT. — Red is best, not from any merit in the coloring, but because this color will not conceal defects in the skin as will black, so that more perfect skins are used for the red.

Mr. ROGERS. — Is not too little attention given to the use of time-savers in the library building, and too much to the question of location and outside communication with readers? The Astor Library is nearer the City Hall now than it would have been at Chambers street twenty-five years ago. What with telephones, postal cards, expresses, and other means of communication and delivery, the library may have almost any convenient site. The centre of population has certainly some advantages, but not enough to counterbalance those of light, air, freedom from exposure to sweeping fires, noise, dust, etc.

Mr. SMITH. — A central location is of great importance in a public library, as the Philadelphia Library discovered when it placed a part of its books at the Ridgway Branch. The latter has an average of about 30 readers, against 600 at Juniper street, and yet the Ridgway is accessible by street cars, at a fare of only 6 cents. It may be necessary, but it is certainly

a disadvantage to divide a library into two parts.

LIBRARY OF CONGRESS.

Mr. SPOFFORD. — It is now eight years since the necessity of a separate library building to accommodate the nation's books was first pressed upon the attention of Congress. By annual reports, by the personal representations of the librarian, and by recommendations of successive committees, that body has been urged to action, hitherto without practical result. Into the causes which have led to the persistent and repeated postponement of the issue so earnestly desired by all of you, I will not here enter. Suffice it to say that we have had no less than four special commissioners, and half-a-dozen joint committees, without any action at all upon their reports. Partly because Congress has taken great liberties with a business which so nearly concerns it, partly because of political excitements and the greater pressure of other measures, partly because of the utter reluctance even to consider the removal of the library from the Capitol, one postponement after another has taken place. That necessity, so apparent to a body of librarians, that the Library of the United States must, by the very laws of its growth, transcend all possible accommodation that can be acquired by an expansion of the Capitol, has failed to impress the Congressional mind, until within a very recent period. Even conceding the necessity of a separate building, there are still at least three well-defined schools of opinion as to where it should be located, and this has been perhaps the most potent of all the causes which have conspired to defer action. Some are in favor of building on the eastern front of the Capitol a library edifice, of say 350 feet square. A large number favor building upon the squares east of the present Capitol park, a measure which would require the appropriation of at least a million dollars for the purchase of ground, besides delaying the building from one to two years, to acquire title by condemnation of the property. A third party favor the location of the government library upon Judiciary square, a government reservation of over 19 acres in the heart of Washington. I have always favored this latter site, on the ground, first, of public economy — as involving no expenditure for the purchase

of land; second, of public utility and convenience, because the place is in the exact geographical centre of the city and involves the least travel to reach it; and, lastly, because it offers the advantage of ample space for future growth, as well as for spacious approaches and facilities on all sides for light and ventilation.

At the last session of Congress a joint select committee, of three Senators and three Representatives, on additional accommodations for the Library of Congress, was created, with power to employ three skilled architects to furnish them plans and information in preparing their report. This committee appointed Edward Clark, architect of the Capitol, Alex. R. Esty of Boston, and J. L. Smithmeyer of Washington, who, after due examination of the Capitol, and the feasibility of extending it for library purposes, reported unanimously that a separate building for the library is, in their judgment, an immediate necessity. Each of the architects, as instructed by the committee, submitted his own separate design for a library building.

The joint committee have devoted much of time and investigation to the entire subject, spending two hours daily in continuous session until their labors were completed, and its members, and especially the chairman, Senator Voorhees, deserve the thanks of the country for the zeal and energy with which the business placed in their charge has been prosecuted. The result reached was, first, a unanimous report in favor of a separate library building; second, the selection of Judiciary square as its site, by the vote of five to one; and, thirdly, the adoption of the plan of Mr. Smithmeyer for the exterior of the building, and the acceptance of Mr. Esty's interior plan, subject to such modifications as the Librarian of Congress should deem expedient. This report now awaits action in Congress, and it is earnestly hoped that before this Conference of American Librarians shall adjourn some expression of their convictions regarding this most important matter will take form.

It was then voted that a committee of three be appointed to prepare a resolution expressing the sense of this Association as regards the needs of a new building for the national library, to be reported at a later session. The

President appointed Messrs. Poole, Chamberlain, and Homes as such committee.

Mr. SMITHMEYER then read his paper on the proposed new building for the Library of Congress.

(See p. 77)

Mr. CUTTER (called upon by the President). — Some time ago, having in prospect the construction of a "stack" at the Athenæum, I made an experiment in Harvard College Library, to determine how much light would penetrate the open-work floors. I had all the side light shut off, and I found that enough light came down thru three floors, on a somewhat cloudy day, to enable me to read the titles on the backs of the books. With a little effort, I could read even the very faint titles on some old books.

LIBRARIES AND THE CENSUS.

Mr. H: RANDALL WAITE, Ph.D., special agent of the Census Bureau. — The courteous invitation, extended to one not a member of your Association, to address you this morning, I regard as a recognition of the importance of the inquiries relating to libraries, the direction of which the Superintendent of Census has done me the honor to place in my hands.

I will not occupy your time with a detailed statement of the proposed inquiries, since the completed schedule will shortly be placed in the hands of librarians throughout the country.

It will suffice to say, that, with the valuable aid of your Secretary, and other officers of this Association, the inquiries have been shaped with the hope of securing such responses as to make the final results of special value as a contribution to sociological statistics.

It has been said (and truly, I think) that, if you would know a man, you have only to study his mind. Passing from the individuals to the mass, it may be said, with equal truth, that you may know a people by a study of their mental characteristics. Upon a knowledge of the influences which shape thought, we may base definite conclusions in regard to results as they will appear in the character and life of a people. Indeed, I think it can be affirmed that the characteristics of a given class in society may be determined, in a large measure, by the mere knowledge that they are readers, without regard to what they read. But, in an infinitely larger degree, we may become acquainted with

popular characteristics and tendencies when we know, not only that a people read, but what they read.

It follows, therefore, that if we can secure possession of accurate, or reasonably accurate, data as to the dominant influence affecting the mind of a people we have an approximate, if not an infallible, indication of the intellectual, moral, and social tendencies of that people.

It is merely a part of a wise philosophy in the administration of affairs, especially in a republic, to place within reach of the thoughtful and conservative men, who are the guardians of the best interests of the State, a knowledge of the direction in which the thought of the masses is drifting, and of the forces by which this direction is determined. Inquiries bearing upon the libraries which have sprung up to answer to the demands of the people of the United States, and upon which they so largely depend for their mental aliment in this day of universal reading, can, if properly and successfully conducted, be made to subserve, in a large degree, this important end.

The investigations in this particular department of the census, it is hoped, will not merely present the number and the superficial features of libraries, but educe such other information as will give to the final results a value not usually attached to such statistics.

To accomplish this end much can be done by the aid of this Association, if the coöperation which has already been extended unofficially by your officers shall be officially given in such a form as to carry with the schedules of inquiry, as they go to every public library in the United States, such commendation as to secure the hearty coöperation of librarians. Not wishing to trespass on your time, I have barely outlined a few of the reasons which lead me to ask your coöperation, and desire to thank you for the opportunity of presenting the matter before you.

FINANCES.

Mr. GREEN submitted the following report: —
SAMUEL S. GREEN, *Chairman of the Finance Committee, in account with the AMERICAN LIBRARY ASSOCIATION.*

1881.

Dr.

Feb. 7. — To amount of receipts reported by Melvil Dui, Treasurer, covering the time from the report made to the Boston meeting of

this Association, June 30, 1879, to date, and divided as follows:—

Life membership fees,	\$72 00
Annual " "	457 30
Gifts	25 00

Postal cards used for the

Library journal, repaid by Mr. Dui . . . 2 00

Feb. 8.—To amount received for annual memberships by the Chairman of the Finance Committee, from Dec. 3, 1880, to date	13 00
	<u>\$569 30</u>

1881. *Cr.*

Feb. 7.—Expenses reported by Melvil Dui, Treasurer, for the time between the dates June 30, 1879, and Feb. 7, 1881, divided as follows:—

Paper and printing	\$32 76
Postage	23 62
Stationery	4 91
Miscellaneous	12 32

	<u>\$73 61</u>
Due the Treasurer at the time of the last report	59 63

Jan. 31.—Stationery bought by the Chairman of the Finance Committee	07
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	<u>\$133 31</u>
Balance in hands of the Chairman of the Finance Committee Feb. 8, 1881	435 99

\$569 30

SAMUEL S. GREEN,

Chairman of the Finance Committee.

The accounts of Melvil Dui, Treasurer American Library Association, have been examined by us, with vouchers, and found correct.

SAMUEL S. GREEN,

J. N. LARNED,

Members of the Finance Committee.

The account of Samuel S. Green, Chairman Finance Committee American Library Association, has been examined by me, and found correct.

J. N. LARNED,

Member of the Finance Committee.

The report was adopted.

Messrs. Noyes, Foster, and Miss Hewins were

chosen as a committee to acknowledge the courtesies received.

The session was then closed.

THIRD SESSION.

(THURSDAY AFTERNOON.)

The meeting was called to order by Vice-Pres. POOLE.

LIBRARIES WITH MUSEUMS.

Dr. HOMES read his paper.

(See p. 80.)

Mr. GREEN. — I fear, Mr. President, when I note the temper of tax-payers in regard to the expenditure of money for educational purposes, that it will be some time before cities and towns will be willing to establish museums in connection with libraries.

I recognize their value, and am obliged to Dr. Homes for presenting his interesting and valuable paper. A considerable portion of the community learn best by means of object-lessons. All persons would receive benefit from the illustrations of their studies and reading that a museum would afford.

Where, however, a town or city can get only a small amount of money for educational purposes, it is not best to run the risk of dividing this amount too much in trying to further several objects. The result might be poor schools, a poor library, and a poor museum. It is better not to have a museum, if there is only money enough for good schools and a good library. Museums require much room, and, consequently, a large expenditure for buildings, as well as for their contents and care.

But, while it will probably prove impracticable in most places to establish museums in connection with libraries, it seems eminently practicable to bring about close relations between libraries and existing organizations which have collections illustrative of different branches of knowledge.

Why should not librarians and directors of libraries take an active part in such organizations? They can at least make them understand that they are ready to afford them any assistance they require from libraries.

In Worcester the library is in close connection with the Natural History Society. Only a fortnight since, a class in ornithology was brought to the library, and there the librarian

placed at their disposal, in a room fitted up with tables and settees, and lighted and heated, a large number of valuable books about birds, in order that the members might become acquainted with the bibliography of the subject.

It is understood, also, that we are ready to buy books needed in making investigations; and we mean to send inquirers to the Society's rooms—now always open—to examine objects that they read about in books.

In like manner, the two art societies in Worcester have a close connection with the library.

Before long, I understand, the members of one of these societies propose to come to the library building to listen to remarks on painting in Italy, to be illustrated by the collection of the Arundel Society's publications in our library.

These are instances of the use in which a close connection can be brought about between existing museums and libraries.

Mr. POOLE. — I have listened to Dr. Homes's paper with interest. It is an able presentation of the arguments on that side of the question; but I happen to be on the other side of the museum question. I do not think it is expedient to divert any portion of the money raised for libraries by public taxation to the maintenance of museums, lectures, or concerts. I do not now recall the law of any State which allows the expenditure of public money for these purposes, and I hope such a law will never be enacted. A museum, to be of any public interest, is an expensive affair. A few stuffed birds, a bottled rattlesnake, a handful of Indian arrow-heads, a case of local geological specimens, a card of fire-bugs, and a stuffed alligator, do not make a museum; and this is about all the small towns could do. One thing at a time. All the money that can be raised by taxation had better be concentrated on a library, that it may be a good library. My friend, living in the State of New York, which has never enacted a practical library law, is not aware how difficult it is for the small towns to raise, by taxation, money enough to properly maintain their libraries. Which of the large cities like Boston, Cincinnati, or Chicago, has money which it could divert from its library fund to maintain what, in those cities, would be truly a museum? I think that we, as libra-

rians, have a field of activity and usefulness wide enough if we devote ourselves strictly to our legitimate profession, and give a wide berth to museums and collections of outside curiosities of every description.

Allusions have been made to the several State laws on public libraries. None of them have been practically insufficient where they have been supported by an intelligent public sentiment. The laws of Massachusetts and New Hampshire, which were the earliest, are very brief, simply giving towns and cities the right to levy a tax for the support of public libraries, and leaving all the details of organization and management to the municipalities themselves. In Ohio and Indiana the libraries are placed under the control of the local boards of education, who appoint a board of managers having only the powers of a supervising committee. Whatever they do or recommend must be approved or disapproved by the board or education. The obvious fault of this plan is, that boards of education are not appointed for this purpose, and the members give little or no attention to the libraries. The later State laws have nearly all been modelled on the Illinois law of 1872, which is the fullest and most carefully considered code on the subject. Such a law is now under consideration by the Legislature of Connecticut. By this law the entire management of the library and its funds, and the appointment and salaries of the employes, are committed to a board of nine directors, who are nominated by the mayor from citizens at large, confirmed by the city council, and hold office for three years. The law prescribes how this board shall be organized, and its duties, and limits the amount that shall be raised by taxation for the library fund. The city council may levy a smaller sum than that named as a limit; but after the money has been levied the council has no further control over it; and, if unexpended, it cannot be turned into the general fund. This law was drafted mainly by Alderman D. L. Shorey, who, for several years, has been the President of the Chicago Library Board, and, as a member of this Association, is now present with us. No citizen of the Northwest has been a more intelligent and zealous friend to library interests than he.

Mr. GREEN read his report on the distribution of public documents.

(See p. 85.)

Mr. FLINT. — I am glad this question of the distribution of public documents has been brought before this meeting, and I can give an example of the difficulties of the present method even here in Washington. Not long since I had occasion to procure some reports upon mining that were published by the Department of the Interior, under which the Patent Office is a bureau, and I found it impossible to procure copies, except in New York, at large prices. The books that should have been sent to the library of the Patent Office had never been sent there, simply because there has been no definite, regular system of distribution to libraries, although the intention is to furnish them to those libraries where they are useful. The difficulty arises from the variety of sources from whence public documents are distributed, as nearly every Bureau or Department that authorizes the publication of a document or report takes at least a partial charge of its distribution, and this is no doubt proper; but there should be some way whereby the libraries that may need those valuable books can secure them before they are out of print. It may be stated, as a fact, that the ordinary government publications are out of print within five years, after which time they can only be procured from dealers and collectors, and at large prices. If the books be valuable, when these valuable reports are first printed, they are scattered broadcast often, and then when really needed cannot be had at any price. The necessity of providing for the proper distribution of documents when first printed is the thing that is most needed. I notice that Dr. Ames, superintendent of documents in the Interior Department is present, who is familiar with the subject, and can give fuller information.

Judge CHAMBERLAIN. — Mr. Smith has been called back to Philadelphia, so that his promised discussion on duplicates must be omitted this afternoon. I myself shall say nothing on the best methods of circulating books in large cities, as the ground has been covered largely by previous discussions; therefore we shall have time for a full discussion of the very important subject now before the meeting.

The Rev. J. G. AMES. — There should be a more liberal treatment of public libraries in the distribution of Government publications. It would be easy for Congress to exercise such

liberality without additional cost, if the expenses of these publications were a little better regulated. More than 10,000 bills have been introduced in the present Congress, and I have found, by a careful examination, that the bills average three and a half pages each, and 924 copies of each bill are printed, even when there is no reprint. Many of the bills are reprinted two, three, or four times, and some of them ten times; but if they were all printed only once they would amount to 32,340,000 folio pages, and if bound would make 64,680 volumes of 500 pages each, or a pile of books rivalling in number the collections contained in the Brooklyn Library, and exceeding the number of volumes contained in any State library, with, perhaps, one or two exceptions. The number of books ordered to be printed by the first two sessions of the 46th Congress, in excess of the regular official editions required by law, exceeds 1,700,000 volumes, not counting the *Congressional record*, of which about 63,000 volumes were issued to Senators and Representatives alone. About 1,400,000 of Government publications were issued in the year 1879-80, besides those issued by executive departments and not ordered by Congress. There are several other particulars in which the expense of Government publications could be materially reduced without detriment to the public interest.

Mr. VINTON. — Can any one subscribe for public documents?

Mr. AMES. — Yes, for the *Congressional record*.

Mr. GREEN. — The committee's draft of a bill will include the *Congressional record*.

A general discussion followed. Mr. Merrill insisted upon a motion to print in pamphlet form.

Mr. ROGERS. — My library, the largest public library in the State, has to depend for its public documents upon the kindness of our Congressmen, consequently we sometimes get duplicate and triplicate copies of some issues, and sometimes nothing. There being no catalogue of public documents, one can never know what is to be had.

Mr. LARNED. — Monthly lists of Government publications should be asked for rather than annual lists. Also, it should be made one of the final objects of the committee to have each and every report and other document that is

published put separately on sale, so that a library or individual may procure any desired part of the contents of the "Congressional set" of volumes.

DR. J. S. BILLINGS. — Is the resolution intended to apply only to documents to be sent to libraries, or to the distribution of all Government documents? If the latter, the proposition is impractical and inexpedient. Every bureau knows best how to distribute its own documents, and to place their distribution entirely in the hands of one man would be to create a small despot, who would be a very troublesome character to deal with.

MR. EDMANDS. — The outcome of all this discussion thus far seems to me to be this: — It is wisest to leave the whole matter with the committee, with the understanding that they shall attempt as much as in their judgment is feasible at present, and try to accomplish the whole as soon as practicable. The knowledge they have acquired of the difficulties, and of the mode of overcoming them, is a safer guide for them than any instructions we can now give.

The committee's report was adopted. The motion to print in pamphlet form was amended to read, "Be referred to a committee of five, to be named by the Chair, with power to print."

On motion of Mr. DUI, after protracted discussion, the following resolutions were voted: —

That the committee of five on public documents shall, in the name of this Association, try to secure from Congress such changes as shall best serve the interests of the libraries of the country. That we specially desire, as early as possible, (1) that all documents for public libraries be distributed thru one agency. (2) That all public documents be offered to the public for sale at a fixed proportion of actual cost of printing, without requiring previous notice from the buyer. (3) That a list of libraries, in addition to the State libraries, be designated to receive all public documents regularly and independently of the will of individual members of Congress. (4) That a list or catalog of all public documents be prepared to date, and hereafter regularly supplemented. (5) That a scheme for arranging, cataloging, and indexing public documents in libraries be submitted to this Association. (6) That the public documents now on hand be

used as far as possible in completing sets in public libraries. (7) To provide that every report and other document published by the Government shall be offered and sold in a distinct and separate form, either bound or unbound.

Mrs. MAXWELL stated some difficulties she had in getting public documents for the State Library of Iowa.

President WINSOR, who had recently entered the room, submitted his ideas on the public-document question, which were found to coincide with the conclusions of the committee and the meeting. After an answer by Mr. Ames to Mrs. Maxwell, and a repetition of the invitation from Gov. and Mrs. Claflin to the evening reception, a recess was taken till 7.

FOURTH SESSION.

(THURSDAY EVENING.)

The President announced the Committee on Public Documents as Messrs. Green, Spofford, Billings, Lee, and Merrill. Letters and telegrams from President Gilman, John N. Dyer, and others, were read. The Committee on Acknowledgments reported the following resolutions, which were unanimously adopted: —

Resolved, That this Association expresses its grateful sense of the unfailing courtesy and cordial and efficient efforts to promote all the purposes of this conference which have characterized its reception in Washington, and that the thanks of this Association be given to the Committee of Reception, to the Library of Congress, to the libraries of the Department of State, the War Department, the Navy Department, and the other Departments; and to the Patent Office, the Corcoran Art Gallery, and the United States Naval Observatory, for invitations to visit their institutions; to Gov. and Mrs. Claflin for their gracious hospitality; and to the President of the United States, for the cordial courtesy which dictated and accompanied his reception of this representative body of American librarians, thus affording an additional illustration of his uniform interest in all that tends to promote popular education and the higher learning.

The Committee on Nominations reported for the executive board Messrs. Winsor, Poole, Whitney, Green, and Dui, who were unanimously elected.

PROGRESS OF POOLE'S INDEX TO PERIODICAL LITERATURE.

Mr. POOLE. — The editors are happy in being able to make a cheering report of progress on the new edition of the "Index to Periodical Literature." The work of more than fifty of the coöperating libraries has been sent in, with the references to the current serials brought down to January, 1880. The matter has been revised by the editors, distributed under the first letter of the headings, and about six hundred pages of copy have been arranged for the printers. It has been deemed advisable not to commence the printing until all the copy is arranged and has received its final revision.

No unforeseen obstacle has appeared in the progress of the work, and the original scheme, in all its details, has been carried out successfully. It was proposed in the original circular to index 182 new serials. The number indexed is 188, comprising 4,318 volumes. Not every serial named in the circular has been indexed. Of several no complete set could be found. A few others were omitted because they were of secondary interest, and others of more immediate importance were substituted for them. Every American librarian has faithfully performed the indexing allotted to him or her; and if, by reason of sickness or other sufficient cause, any one has been unable to finish their task, some other librarian has done it. The work of these many collaborators has, on the whole, been admirably done, and in conformity to the rules prescribed; and when revised by the editors it has fitted together as well as if it had been done by a single person. It is the occasion of just pride and mutual congratulation that this first attempt at coöperative work organized by the American Library Association has been carried through successfully, so far as the collaborators are concerned. What remains to be done is for the editors to do.

Some of the work undertaken by the English and Scottish librarians has been received; but the larger portion of it was not sent in within the time prescribed, and hence is necessarily deferred until the publication of the first supplement. Before our transatlantic friends had an opportunity to make their selections, the more important English serials had already been allotted to the American librarians, and

hence they were left with only their own serials of secondary interest to select from. Perhaps if they had made their selections earlier, and with the same confidence in the coöperative principle, and faith in each other, which the American librarians have, they would have worked with more interest and efficiency. From the beginning, it has been a question with the American committee whether it were advisable in this edition to include the contents of the English serials of secondary interest, which necessity now compels us to omit. This matter would largely increase the size of the volume, without adding in the same proportion to the value of the work. It is a practical question whether the matter we have now in hand — which is five or six times as much as was contained in the edition of 1853 — is not all that we can safely print at this time. It is a part of our plan to issue every five years a supplement, which will include not only references to the current serials to the latest date, but also such omitted sets of periodicals as it may seem desirable to index. The omitted English serials, which have been alluded to, are well worth indexing, and it is a proper and legitimate work for the Index Society of London to undertake. That society had its origin in the presentation of the scheme of the American "Index to Periodical Literature" to the International Conference of Librarians, held at London, in October, 1877, and the comments it suggested. It will be difficult to find in what the society has done, or has proposed to do, anything that will compare in usefulness to completing the work of indexing the list of periodicals which were assumed by the librarians of the United Kingdom as their contribution to the "Index to Periodical Literature."

To the question which meets us on every hand, "When will the Index be completed?" we will reply as definitely as we can. The arrangement and revising of the copy we estimate will be completed during the present year, and the printing will begin early in 1882, and will be carried on as rapidly as the nature of the work will permit. It will make a royal octavo volume of about 1,200 pages, and Messrs. James R. Osgood & Co., of Boston, will be the publishers. Dr. Billings, whose medical catalogue is of about the same size, finds that, with the resources of the Government Printing Office at his command, he can print only one volume in

a year. We hope to see the publication of the volume early in 1883.

A personal acknowledgment is due to my associate editor, Mr. William I. Fletcher, of the Watkinson Library, of Hartford, Conn., whose intelligence and executive ability have largely contributed to the success of the undertaking. He has relieved me from a burden of work and responsibility which I could not, with my other public duties, have undergone.

W. F. POOLE.

The PRESIDENT. — Some members of the Association may not be aware that the room we are now sitting in is within the original walls of Ford's Theatre, and above what was the stage at the time of the assassination of President Lincoln; and that it was in one of the houses on the opposite side of the street that he died.

METHODS OF SECURING THE MULTIPLICATION OF LIBRARIES.

Mr. HOMES. — I closed an article on "Legislation for Public Libraries," which was published in the *Library journal* in 1879, with this question: "Must the multiplication of libraries be left solely to the spontaneous action of solitary individuals?" I think it is pertinent that this question should be repeated now and again, and until some answer has been given. The libraries referred to are the free public libraries, without defining any particular mode in which they shall be administered. There are men who think public libraries are of no particular value; and so there are men who think our public-school system is a failure. They are of the same class of observers as those who think that human nature is a failure. No doubt there is as much to learn regarding libraries as there is to learn about education, as to the best means of turning our forces to account.

In spite of all questionings, and of all shortcomings, we none of us doubt that to make accessible to all men the best things of all that man has thought, done, and put into print, is one of the most useful aims of this generation. We believe that to multiply the libraries in which these things are preserved is an undertaking worthy of us and of all who would be public benefactors.

Those who engage in this discussion may

point out various other methods. I have long had my mind resting upon one method, which is this, — to secure a fund sufficient to support an agent or secretary for five years, or even a permanent fund for a permanent secretary. From the labors chiefly of such a secretary for the promotion of prison reforms, dating back to 1825, have proceeded nearly all the progressive improvements in that department to the present time. It is not unreasonable to hope that a single individual, on due presentation of the subject by members of the Association, might be ready to create alone a sufficient endowment for the purpose of sustaining the agency. I will throw my suggestion into the form of two resolutions, for the consideration of the conference: —

Resolved, That, in the opinion of this conference, it is desirable that an agent or secretary, representing this Association, should be supported for a period of at least five years, who should devote his time to the promotion of the establishment of public libraries by means of correspondence, the press, and public addresses.

Resolved, That the putting in operation the above resolution be referred to the Executive Committee of the Association.

Dr. BILLINGS. — The resolution proposed implies that the proposed missionary should be paid. As the society has before it several proposals for work to be done, which have been approved, and declared to be urgently needed, but which have not been carried out because of lack of means, it seems best to attend to these first before creating a new source of expenditure. The librarians are doing this educational work already. The *Library journal*, which needs additional means, is engaged in doing precisely this thing.

For these and other reasons, I oppose the resolution, feeling sure that if we had any spare money it could be invested to much better advantage; and, being very distrustful of professional philanthropists myself, I fear that others might look on the proposed missionary in this light.

Mr. GREEN. — I agree with Dr Billings that the missionary work of the Association will be best done through the influence of the meetings of the Association, through the *Library journal*, and by the individual efforts of working librarians, rather than by the employment

of a paid secretary. We need what small sums of money we can get for publishing the proceedings of the meetings, and for work already begun under our countenance, and we should also see to it that the *Library journal* has a hearty support. We cannot undertake more at present. Does any librarian here find it burdensome to do the missionary-work he is called on to perform? The city of Worcester is in a county in which forty towns have public libraries. It is, I believe, the banner county for libraries in the United States. Several of these libraries look to us for advice and assistance. Recently I was requested to go to a very flourishing town in the county to see if I could help awaken an interest among the citizens in regard to the establishment of a public library there. A few months before that I was asked to go to another town, where a library was just being started, to give advice in regard to methods to be adopted in its management. Neither of these trips occupied more than a single night. Other libraries send representatives to Worcester to examine our methods, or write to me to get assistance in regard to the selection of books. The instance cited by Mr. Poole shows, unless I am mistaken, the value in doing missionary work, of the organization of the Library Association, and of the publication of the *Library journal*. He speaks of the excellence of the Illinois State law regarding libraries. The way in which the gentleman from Norwich came to correspond with Mr. Poole regarding the Illinois law, which he has brought to the attention of the Connecticut Legislature, was as follows: He came to me in Worcester, and wanted to know about library legislation. I gave him references to the *Library journal*, so that he could find Dr. Homes's paper and report on this subject, read at the Boston meeting of this Association, a copy of the Illinois law, and other matter printed in the *Journal*. In this way he was led to write to Mr. Poole, and afterwards to see to it that the Illinois law was introduced into the Connecticut Legislature.

Miss HEWINS.—The Connecticut law in regard to libraries is especially good.

Mr. POOLE.—In the North-west they are rapidly establishing libraries without the aid of such an agency as was proposed; and as New York for nine years has possessed a law allowing towns to tax themselves to sustain libraries, and not a single library has been established

under that law, I will vote for the resolutions, provided that the missionary's field of operation is limited to that State.

Professor ROBINSON.—I am ready to second Mr. Poole's motion that if a library missionary be appointed he should be set to work in the State of New York. In many towns in that State we have just books enough collected under our old school-district library system to prevent the establishment of large public libraries. Some of us have tried hard to stir up public opinion, and start a movement in that direction, but with little success. We seem to be under a crust in New York, where it is impossible to accomplish anything.

Dr. HOMES.—In many of the cities, like⁹ Syracuse, Utica, Poughkeepsie, and Newburgh, public libraries have been founded and maintained by the boards of education, under the school law.

The PRESIDENT.—Pennsylvania might claim some of the services of the missionary.

Mr. TYLER.—I am glad to hear such a report from the five north-western States. In Indiana a great interest is felt in the subject of free public libraries; and in December last, within the space of ten days, I had letters from South Bend, on the north, Terre Haute, on the west, and Muncie, on the east, asking for advice regarding the formation and conduct of such libraries. We have a most admirable act for their support, and one which I will not admit to be surpassed by the Illinois act. Our libraries are under the control of the Board of School Commissioners, the members of which are chosen at an election held two months from any other election, and when no other officers of any kind are voted for. Thus questions of politics seldom, if ever, enter into their selection. This Board of School Commissioners has power to levy an annual tax of not exceeding two cents per \$100 of taxable property, for the maintenance of free public libraries in connection with the common schools of cities of 30,000, or more, inhabitants; and as the city assessor has no discretion in collecting it we are not dependent upon any political body whatever. The Indianapolis public library is managed by a committee of the Board of School Commissioners, of which committee I am, *ex officio*, secretary, and this committee has always shown me the greatest courtesy and consideration. I have the power

of nominating my own subordinates, and also that of their suspension. I do not think that there is more than one librarian here to-night who enjoys more privileges than I have. [Mr. DUN. Who is he, Mr. Tyler? If you don't tell each one will think it is he.] Only last Friday a bill passed our State Senate¹ which grants to cities of 10,000, or more, inhabitants the power to establish free public libraries similar to ours. So you see that Indiana is not missionary ground with regard to the library question.

Mrs. MAXWELL. — The law in Iowa provides that any regularly incorporated public library in the State, containing 300 volumes, shall receive, regularly, the laws, documents, in short, all the State publications, excepting the reports of the Supreme Court. This includes the libraries of all societies which do not exclude the public.

Mr. GREEN. — What evils have risen under the Massachusetts law?

Mr. FOSTER. — Efforts to extend the advantages of public libraries, similar to those of which Mr. Green spoke a few moments ago, have been going on in Rhode Island, and for some time; and I only regret that there is not more in the way of actual results to report. A quarterly meeting of the officers of the free libraries of that State has been regularly held for more than a year past, at which topics connected with library management were discussed and explained. These meetings are in no sense intended as constituting an organization independent of the American Library Association, but are rather a means of extending and supplementing its influence. Like Mr. Green, also, I find a great amount of personal consultation with the representatives of libraries in my vicinity falling very naturally within the line of my work, as well as much correspondence. This has not yet reached a point where it is an absolute burden, and the help rendered, is, of course, such as any librarian would cheerfully give.

Dr. PIERCE. — It has occurred to me, Mr. President, that we have overlooked the most important missionary agency for spreading correct views of free libraries, and their management. A cultivated agent might be of ser-

vice in some portions of the country; but we have already in operation a very much more effective instrumentality. This is the meeting of the Conference of Librarians itself, in the chief cities of the land. No single agency can be as impressive as this. My own interest in the question was awakened by reading the full reports of the earlier meetings of the Association, in Philadelphia and London; but a profounder impression was made by personal attendance upon the very successful convention held in Boston. The papers read during its sessions were eminently calculated to challenge attention, and they did draw together daily a large audience; but, what was more to the purpose, the meetings attracted the attention of the public press, and very full reports were circulated over the country, and were made the themes of wide editorial comment. Indeed, discussions, which were then awakened, have not yet lost their vitality in that vicinity, but are constantly appearing in various forms of newspaper consideration. Whatever funds we can secure, certainly, will be best expended, for the highest interest of the Association, in facilitating the regular meetings of the convention, in different prominent centres, and in distributing full reports of its papers and proceedings as widely as possible. The hour has hardly come for the itinerant instruction proposed in the resolution; and the necessity that suggests it is fully met, it seems to me, by the agencies already in existence, only requiring funds to multiply effectually their usefulness.*

Upon Dr. HOMES's motion, the resolutions were laid upon the table, he expressing at the same time his conviction that the time would come when the Association would recognize the value and the expediency of the measure.

LIBRARY OF CONGRESS.

Mr. POOLE, for the committee, submitted the following resolution, which was passed unanimously: —

Resolved, That the American Library Association of Librarians, assembled in annual conference at Washington, shares the convictions of the people of the United States of America, that the library of Congress is emphatically the one national library, the only one in the country destined to be encyclopedic

¹ It has since passed the lower house, and been signed by the Governor.

and universal in its comprehensiveness, like the governmental libraries of the Old World; and it therefore reaffirms the spirit of the resolution adopted at its last meeting, that it is desirable that provision should speedily be made for the library by a new building, to be commensurate with its present necessities and future magnitude.

It was voted, that the secretary transmit a copy of this resolution to Senator Voorhees of the Senate Committee on a library building.¹

LIBRARIES AND EDUCATION.

Dr. WARREN read his paper.

(See p. 90.)

The PRESIDENT called upon Judge Chamberlain.

Judge CHAMBERLAIN. — You ask me, Mr. President, to give you some account of an experiment made in the Wells School in Boston, having for its object the forming of a closer union between the public library and the public schools of that city, not as an end, but as a means of promoting the study of good literature, and thereby imposing some check upon the indiscriminate reading of sensational literature. I cheerfully comply with your request, though I have already given in my annual report, and later, in the *Library journal*, nearly all I have to say. But I am quite willing to speak in this living presence, though your call upon me is entirely unexpected; and all the more so, because, apart from its being a Boston notion for which I have some responsibility, I believe the plan to be sound in theory, practicable of general application, permanent in its character, and of very considerable value for the promotion of good reading, as well as dissuasive from the reading of trash.

The plan proceeds upon a theory of wide application, — that when one comes to know a good thing he will neither use nor value a poor thing; when he intelligently enjoys a good book, he has acquired a positive distaste for a meretricious book. In short, that in educated taste and judgment is to be found the safeguard from the sensational and false in books, as in other works of art, — for all books that form a part of the imaginative literature of

the world are works of art, just as truly as its sculptures, its painting, or its architecture, — and that to enjoy and profit by literature, it is essential that children, at an age not later, say, than fifteen or sixteen, should be taught to read literature as an art. And, finally, that this instruction, under our system of education, can not only be best taught in the public schools, but unless taught there, and upon some systematic plan, will be seldom acquired, — such is the theory of the scheme. The practical administration contemplates the loan from the public library, to the public schools, of the requisite copies of the same volume, for the time they may be needed to accomplish the desired end.

The experiment in the Wells School — if that which is an unqualified success may longer be termed an experiment — began in this way: Mr. Metcalf, the principal, came to understand the plan; nor did it take him a long time. He approved of it; and, what is more, he entered upon its execution with an enthusiasm, which, enkindling intelligence, is sure of success.

Mr. Metcalf made requisition upon the public library for twenty-five copies of one of Mrs. Whitney's stories, — Leslie Goldthwaite's *Journal*, — which were forthcoming only when supplied from a private fund. They were presented to the library on condition that they should be loaned on the terms proposed by Mr. Metcalf, and were shortly in the hands of the first class of girls in the Wells School, to be read as any other books which they might draw from the library on their library cards. In this way was realized an essential part of the scheme. The teacher had at his disposal the books of his own selection, in the desired numbers, to accomplish a result he deemed of first-class importance. There was no dictation by committees, trustees, or librarians. The intelligence and character of the teacher, to whom had been intrusted the education of girls, was presumed to be a sufficient guarantee for the wisdom of the selections made by him.

When these books were in his hands, they were given out to the pupils, to be read out of school hours, as any other book from the public library. Once a week, for an hour, they were examined in a free, conversational way as to what they had read. It would be impracticable for me,

¹ The resolution was presented in the Senate, the next day but one, by Senator Voorhees.

at this time, to enter into the details of the process by which the class of fifty girls acquired, in the course of a few months, clear and precise ideas as to the structural character of the story; the relation of the parts to each other, in which, by a series of progressive incidents, the *dénouement* was reached; the interaction of character and events, as promoting or retarding the movement of the story; and, finally, a critical estimate of the justness of sentiment and propriety of diction, not only in the narrative, but in the characters. It must suffice to say, that they came to have a perception more or less clear, according to the intellectual endowments of individual girls, of all those elements by which the professional critic is enabled to give judgment upon the value of any novel as a work of art.

And thus, for the first time in their lives, and by a process of actual judgments applied — not theoretically, but practically — to a work of art, they acquired notions respecting the relations of literature to art, which, it is submitted, they could have so well acquired in no other way, and which will tend to control all their future reading, and save them (because they are now competent to determine its worthlessness) from waste of time, and worse waste, in the reading of sensational literature.

During the year they read a volume of poetry, the *Lady of the Lake*, and a volume of history, *Towle's Pizarro*, in the same critical way, from which they learned more to be similarly estimated by their artistic value. And, theory apart, I am told that these girls are proof against vitiating reading, because they have entered into a new world, with its abounding satisfactions, — the world of art; nor will it be long before they perceive the co-relation and unity of all the arts.

These books, having done their work in the Wells School, have gone, in excellent condition, to do the same work in other schools; while, in the Wells School, the principal has new books, supplied in a similar way, the examination and criticism of which are as interesting to him as they are to his new classes. Thus he and they are stimulated from year to year by what is new, and at the same time good.

If it be asked, What has all this to do with popular libraries? my answer is; — Nothing, perhaps, if we can look unconcerned upon the

statistics that show seventy-five per cent. of our circulation to be fiction, and much of it poor in character, while the treasures of learning and wisdom we so much value are standing idle upon our shelves; nothing, if the work we can do, can and will be as well or better done in some other way. But until that is demonstrated, the success of the plan inaugurated in the Wells School is entitled to receive — as I am happy to say it is receiving — the respectful consideration of teachers and librarians.

THE PRESIDENT. — Will not Mr. Merrill add a word in reference to the work which has been done in the schools of Cincinnati?

MR. MERRILL. — Two or three years since, it was thought that sufficient pains had not been taken to cultivate the memory of the pupils. It was therefore decided to place upon the black-board of each school-room, just before the close of school every day, a short passage from some author, to be committed to memory by the pupils. The success of this appeared so great, that a small book of prose and poetical quotations, suitable to the age of the children, was prepared and brought into use in the school-rooms. This book contained the names of the authors of the quotations, with occasional brief biographical notices. The teachers and pupils were encouraged to learn more about these authors, and thus the libraries were brought into requisition. After a time it was concluded to set apart two or three days in each year, to be devoted to the celebration of the birthdays of authors. The birthdays of Longfellow, Whittier, and Holmes have now been honored in the Cincinnati schools. Each pupil has been urged to learn all in his power in regard to these authors and their works. The libraries largely increased their supply of the works needed, and the interest of the children has been wonderful. Not only have the children learned something of the use of books, but their parents have become interested, and through the notices of the press the sale of the works of the authors named has largely increased, not only in Cincinnati, but throughout Ohio, Indiana, and Kentucky. At times the bookstores have not been able to keep up with the demand. I know, therefore, that this work, undertaken at first merely as an exercise of memory, has developed into what is a cultivation of the literary tastes of the community.

REPORT ON A. L. A. CATALOG.

Mr. DUI. — I am not at all satisfied with the report I must make. The importance and value of the work has become only more and more apparent as we have gone on. People on all sides ask for it, and are depending on the greatest help from it. It is practicable in every other respect, and would be in your hands to-day if there had only been some one who could have given proper time to it. I referred to the same difficulty in my report as secretary. Nothing is so good that it will go forward by its own momentum. We all agree on the necessity of something. A perfectly practicable plan is devised and accepted, and nothing is lacking except some one to do the work, and all are so busily engaged, each with his own cares, that the all-important general work is not done.

As announced in the *Library journal* from time to time the A. L. A. CATALOG has gone forward up to the time of Mr. Perkins leaving for San Francisco. The 5,000 titles were selected, notes made to quite a portion, and the first large section, religion, was ready to go to the printer the next week, when it seemed best for the editor to accept the new position in San Francisco. The next week, the other best man for our association work, Mr. Bowker, as suddenly accepted an important literary position in London, and, personally, I have found it utterly impossible to get any time to attend to the A. L. A. Catalog. It stands there to-day. Completed and printed, it will do more good than any other coöperative work we have ever undertaken. I am still hoping to find a competent man, who, for the trifling compensation it will yield, will take up the A. L. A. work, and push it forward. I thought I had secured such a man, but he can come only on a guaranteed salary, and I can do the work as easily as guarantee the pay. I confess I am a little discouraged at the present outlook. My report is, in brief, No progress since the last report in the *Library journal*.

The announcements were then made, and the meeting adjourned.

FIFTH SESSION.

BALTIMORE.

(FRIDAY MORNING.)

The PRESIDENT called the meeting to order at 11.40, and introduced President D. C. Gilman, of

JOHNS HOPKINS UNIVERSITY.

President GILMAN extended a hearty welcome to the assembled librarians, and expressed the obligations of the university to many of the company for courtesies extended to his colleagues and himself, particularly in the loan of volumes requisite for the prosecution of certain researches. He described briefly the chief literary and scientific foundations of Baltimore, and gave an account, somewhat extended, of the Johns Hopkins University, which is, in several respects, unique among the colleges of this country. It began with calling to its instructions twenty graduates of other colleges, and constituting them a corps of "Fellows." This number has been maintained steadily during the five years since past, and around this nucleus are now gathered more than sixty other graduate students, besides the undergraduates. A liberal policy has been pursued by the trustees in respect to the publication of memoirs or journals. Five magazines, devoted to mathematics, chemistry, philology, biology, and physiology, besides the quarto bulletin of the university and the annual reports, are now published under the auspices of the Hopkins foundation. Apparatus, particularly of a kind adapted to investigation, has been liberally purchased.

The excellent collections of the Peabody Institute, and of other Baltimore libraries, have, to a certain extent, supplied the University with the books required by its teachers and scholars; but the University is also building up a choice collection of its own, which numbers over 10,000 volumes, and is under the care of Dr. W. Hand Browne. In this library, which is open daily from 9 A.M. to 10 P.M., the greatest possible freedom is allowed in access to the shelves. The sum of nearly \$1,000 is annually spent in periodicals, not including newspapers or the popular magazines. The reading-room contains a large collection of dictionaries and cyclopædias, and also the standard works of literature and science, ancient and

modern, in their original tongues. There are also many small special libraries brought together by the chief instructors, either for daily use, or to supplement the other libraries of Baltimore. Everything possible is done to make the library convenient and useful to those who are entitled to its use.

In conclusion, President Gilman referred, with some emphasis, to the dictum, often forgotten by the custodians of a library, but, through this Association, acquiring the authority of a fundamental law, — that "books are never so useful as when they are most in use;" in other words, that it is more important to think of the needs of present students and readers, than of remote, possible investigators, who may not care at all for the collections of to-day.

In behalf of the trustees of the University, President Gilman invited the association to partake of a lunch after the morning session was concluded.

The PRESIDENT gracefully complimented the young university, and said that Harvard University had had to come here to steal away a professor of Sanskrit.

INVITATIONS.

Provost N. H. MORISON, of the Peabody Institute, extended a cordial invitation to the members to visit the institution at the close of the meeting, explaining the work of the Peabody to foster and maintain an extensive reference library, lectures on scientific and other subjects, and the prosecution of studies in art and music. Dr. Morison said the Peabody library now contained 71,000 volumes, costing, on an average, \$3.50 per volume, making it the most expensive and valuable library in the country.

Mr. J. W. M. LEE extended a similar invitation in the name of the Mercantile and Maryland Historical Society Libraries.

Mr. E. BIGMORE, of the Library Association of the United Kingdom, hoped that many of the audience would be able to be present at the next meeting of that Association in England.

RELATION OF LIBRARIES TO COLLEGE WORK.

Prof. ROBINSON read his paper.

(See p. 97.)

LIBRARY AIDS.

The PRESIDENT, for lack of time, omitted what he had to say about library aids; and —

Mr. GREEN read his paper on that subject.

(See p. 104.)

Mr. DUI. — I am beginning a work similar to Mr. Green's, but vastly fuller, which I hope to finish within a year. This is a consolidated analysis of the five volumes of the *Library journal*, omitting all that has been superseded, and giving only those things still standing as the best advice or information on their respective topics. From each topic there will be complete references to everything necessary to be read up in the five volumes; and the book will render the five volumes of the *Journal* as accessible as a dictionary; but, even more important, it would save those consulting it from going over the large amount of matter that contains no results, and that, perhaps, has been rendered void by something later on the same subject.

VARIOUS VOTES.

On motion of Mr. DUI, it was —

Voted, That we express to Mr. F. Leypoldt our appreciation and hearty thanks for the devotion he has shown to the library interests in carrying on the *Library journal* at a large pecuniary loss, and that we pledge to him anew our hearty support in his effort to still maintain it.

Voted, That 500 copies of the proceedings of this conference be printed, and that a copy be sent, without charge, to each member who has paid his annual fee; the fulness of the report to be determined by the Finance Committee.

Voted, That Mr. Leypoldt be requested to print the proceedings in the *Library journal*, and also the edition of 500 copies with covers, and that the Finance Committee pay the entire printing and paper bill as presented by Mr. Leypoldt.

Mr. DUI. — For the reasons given in the December *Journal*, it seemed best to incorporate the A. L. A. before an annual meeting formally authorizing it. As a mere matter of form, it now becomes necessary for us to vote to ratify and accept this action, so that the incorporation may properly date back to 1876, and its records be continued without any break or change. I therefore offer the following motion, in order to perfect, formally, the incorporation of the Association: —

Voted, That the officers, committees, and members of the society organized in 1876,

hereby accept the elections to the same positions in the incorporated Association as formally tendered; that the officers and committees are hereby instructed to turn over to the corporation all books, papers, records, funds, or other property belonging to the society, and to take any other steps necessary to merge the society completely in the new corporation, making its books, records, and accounts, as far as practicable, date back to the organization in 1876.

The motion was unanimously carried.

On motion of Mr. DUI, it was —

Voted, That the Executive Board be requested to establish (if they find it practicable, without pecuniary liability to officers or members of the A. L. A.) a library bureau, as a center for library interests, and to carry out, as far as may be, the plans for coöperative cataloging and indexing, title-slips, indexes to subject headings, the A. L. A. catalog, exchange of duplicates, the library manual, and the various other plans devised, or to be hereafter devised, by the A. L. A., or the Coöperation Committee, and that we promise to such a bureau, if established, our hearty coöperation and support.

That the American Library Association appreciates the earnest and extended efforts being made in behalf of libraries, under the direction of Dr. H. R. Waite, of the Census Bureau, and that it urgently requests the librarians of the country to coöperate heartily in his work, and to answer, as fully and as accurately as possible, the inquiries about to be made.

Mr. MERRILL, in behalf of the librarians of Cincinnati, invited the Association to meet with them in May, 1882. After some animated discussion of the attractions of the weather [Mr. DUI. — It is not certain about the weather in June. Mr. FLINT. — We are altogether too certain what it would be in June], it was "*Voted*, That when we adjourn it be to meet at Cincinnati in May, 1882."

Mr. EDMANDS offered the following resolution, which was unanimously passed:

Resolved, That, in the opinion of this Association, the time has come for a radical modification of the prevailing typical style of library building, and the adoption of a style of construction better suited to economy and practical utility.

The following letter from the Secretary of

the Library Association of the United Kingdom was read:

2 SOUTH SQUARE, GRAY'S INN,
LONDON, 23 Jan., 1881.

MR. WILLIAM E. FOSTER:—

Dear Sir:—I have the honor to acknowledge the receipt of the invitation to any of our members to attend the coming meeting of the American Library Association. The invitation has been conveyed to our members through the Monthly Notes. Your letter was read at the last meeting of our Council, and a resolution of good-will and sympathy was carried; and I was desired to convey this to you, with the expression of our wish that you may have a very pleasant and successful gathering in February.

Personally, nothing could give me greater pleasure than to attend a meeting of your Association, and I hope to do so before long; but it will not be possible, I am sorry to say, for me to do so this year.

Yours faithfully,

ERNEST C. THOMAS,
*Hon. Sec. Library Association of the
United Kingdom.*

On motion of Mr. POOLE, it was *Voted*, That the Secretary be requested to acknowledge the receipt of the letter of Mr. Thomas; and, in the name of this Association, to express our sympathy with the Library Association of the United Kingdom.

A recess was then taken for lunch.

ADDRESS BY PRESIDENT J. H. B. LATROBE.

Upon reassembling an address was made by Hon. J. H. B. Latrobe.

Your presiding officer having promised that the President of the Historical Society would address you briefly, the best way in which I can redeem his pledge is to bid you all, on behalf of the society I represent, the heartiest welcome on the occasion of the visit which I understand you propose paying to its rooms. I am not sure, however, that the best preparation for the briefest speech is such a collation as we have just enjoyed. Your visit there, I am very sure, will result in good to the cause in which you are all so much interested. In the early days of Baltimore, — say some sixty or seventy years ago, — some gentlemen of intelligence and wealth procured a charter from the Legislature, styling them "The Library Company of Baltimore," and a library was established, which is still in existence in the rooms of the Historical Society, and which even now has no inconsiderable value as a library of reference. It was a

circulating library, as well as a library of reference, maintained by annual subscription, and more resorted to because of its miscellaneous than of its scientific collections. As years went by, the interest in it diminished. Unable to keep up with the annually increasing supply of lighter reading, it may be said to have quietly died out, when some enterprising gentlemen, ashamed that Baltimore should have fallen so far behind in this regard, took charge of the City Library, united with the Historical Society and the Mercantile Library Association; and, appealing to the public when it was in a liberal mood, obtained the means to erect the building known as the Athenæum, under a charter from the Legislature, where, for a season, the three flourished under one roof. The same energy that had revived the City Library procured the means to finish with taste and elegance the second story of the building, which had been devoted to it, as you will see when you honor the Historical Society by your proposed visit. Unfortunately, however, the liberality that furnished the cases was not equalled by interest in the books upon their shelves, and the City Library, in its new home, seemed to fall into the moribund state that was its condition in its old abode; and there is no knowing what would have been the condition of Baltimore as regards a public library had not George Peabody, in the establishment of the Peabody Institute, provided for the creation of the collection which, housed as you will see when you visit it, promises to become one of the best and choicest libraries of reference of the country. After Mr. Peabody's liberality had thus made the success of a library independent of the impulses of subscriptions, the old City Library, whose existence for more than half a century had been a very fitful one, breathed its last in the arms of the Historical Society, which — endowed by Mr. Peabody with a gift of \$20,000 — has taken charge of its remains, and preserves them in the honor due to their present and daily increasing value.

Your visit, ladies and gentlemen, will not

be without its importance to us here in Baltimore. You will have helped to make an interest, which has heretofore been impulsive, continuing and durable, until we have taken another step in this connection, and will have added to the libraries that we already have, — and whose uses are confined to those who can visit their halls, — a free public library, which will circulate among the people in their homes, at their firesides, the treasures of literature, science, and art, which will add learning in its broadest sense to knowledge, and place all classes of the community on the same footing as regards the means of acquiring it.

Professor ELLIOTT, of Baltimore City College, gave an interesting account of the school library in that institution.

ACKNOWLEDGMENTS.

Mr. NOYES reported, in behalf of the Committee on Acknowledgments, the following resolutions, which were unanimously adopted:

Resolved, That the thanks of this Conference be tendered to the president and trustees of the Johns Hopkins University, to the librarian and trustees of the Peabody Institute, and to the librarian and officers of the Maryland Historical Society, and Mercantile Library Association of Baltimore, for the courteous attentions and generous hospitality which have made this meeting so instructive and agreeable.

Resolved, That the thanks of this Conference be presented to Surgeon-General Barnes for his courtesy in furnishing for the use of the sessions of the Association in Washington the library rooms of the Army Medical Museum.

Previous to adjournment President Gilman extended a general invitation to the delegates and visitors present to examine the buildings and laboratories of the University, and nearly all of them availed themselves of it.

The convention then adjourned, to meet at Cincinnati, in May, 1882.

OUT-DOOR BOOKS.

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Their enchantment never palls upon the sense; they charm the reader into love of the scene, if not of the writer, and fill his memory with sweet and pleasant images of the beauty and mystery of Nature.—*New York Tribune*.

A WEEK ON THE CONCORD AND MERRIMACK RIVERS. \$1.50.

If any would steal away from wintry skies into the regions of perpetual summer, let him take the proffered hand of Thoreau, and, by the side of a slender New England river, walk with the sages and poets of all ages. He cannot help but learn, and cannot choose but admire.—*The Independent* (New York).

EXCURSIONS IN FIELD AND FOREST. With a Biographical Sketch by R. W. EMERSON, and a portrait. \$1.50.

CONTENTS: Biographical Sketch, by R. W. EMERSON; Natural History of Massachusetts; A Walk to Wachusett; The Landlord; A Winter Walk; The Succession of Forest Trees; Walking; Autumnal Tints; Wild Apples; Night and Moonlight.

His observation of the phenomena of nature was most thorough, sympathetic, and profound; and his descriptions are of the best in literature. His "Excursions" is the most original book we have lately had, as well as the most valuable record of exact observation of nature.—GEORGE WILLIAM CURTIS.

THE MAINE WOODS. \$1.50.

CONTENTS: Ktaadn; Chesuncook; The Allegash and East Branch.

His power of observation seemed to indicate additional senses. He saw as with microscope, heard as with trumpet; and his memory was a photographic register of all he saw and heard.—R. W. EMERSON.

CAPE COD. \$1.50.

CONTENTS: The Shipwreck; Stage-Coach Views: The Plains of Nauset; The Beach; The Wellfleet Oysterman; The Beach again; Across the Cape; The Highland Light; The Sea and the Desert; Provincetown.

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WRITINGS OF JOHN BURROUGHS

PEPACTON. \$1.50.

CONTENTS: Pepacton: a Summer Voyage; Springs; An Idyl of the Honey-Bee; Nature and the Poets; Notes by the Way; Foot-Paths; A Bunch of Herbs; Winter Pictures; A Camp in Maine; A Spring Relish.

WAKE ROBIN. Illustrated. \$1.50.

CONTENTS: The Return of the Birds; In the Hemlocks; Adirondac; Bird's-Nests; Spring at the Capital; Birch Browsings; The Bluebird; The Invitation.

Mr. Burroughs, as a careful observer of nature, and one of the most fascinating descriptive writers, is an author whose reputation will constantly increase; for what he does is not only an addition to our information, but to the good literature that we put on the shelf with Thoreau and White of Selborne.—*Hartford Courant*.

WINTER SUNSHINE. \$1.50.

CONTENTS: Winter Sunshine; Exhilarations of the Road; The Snow-Walkers; The Fox; A March Chronicle; Autumn Tides; The Apple; An October Abroad.

This is a very charming little book. . . . The minuteness of his observation, the keenness of his perception, give him a real originality, and his sketches have a delightful oddity, vivacity, and freshness.—*The Nation* (New York).

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CONTENTS: Birds and Poets; April; Touches of Nature; A Bird Medley; Spring Poems; Our Rural Divinity; Emerson; The Flight of the Eagle (Walt Whitman); Before Genius; Before Beauty.

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LOCUSTS AND WILD HONEY. \$1.50.

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Mr. Burroughs is one of nature's most persuasive prophets. His love for the woods and the fields, and all that is therein, is so sincere and ardent that the reader is brought under its spell almost unawares. He is a close and careful observer, who has always something to tell us about the ways of nature which had been before unnoticed. Add to this that he is a man of singularly subtle imaginative perception, with a rare sense of humor, whose style is simplicity itself, and the charm of his writings can be imagined.—*Philadelphia North American*.

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